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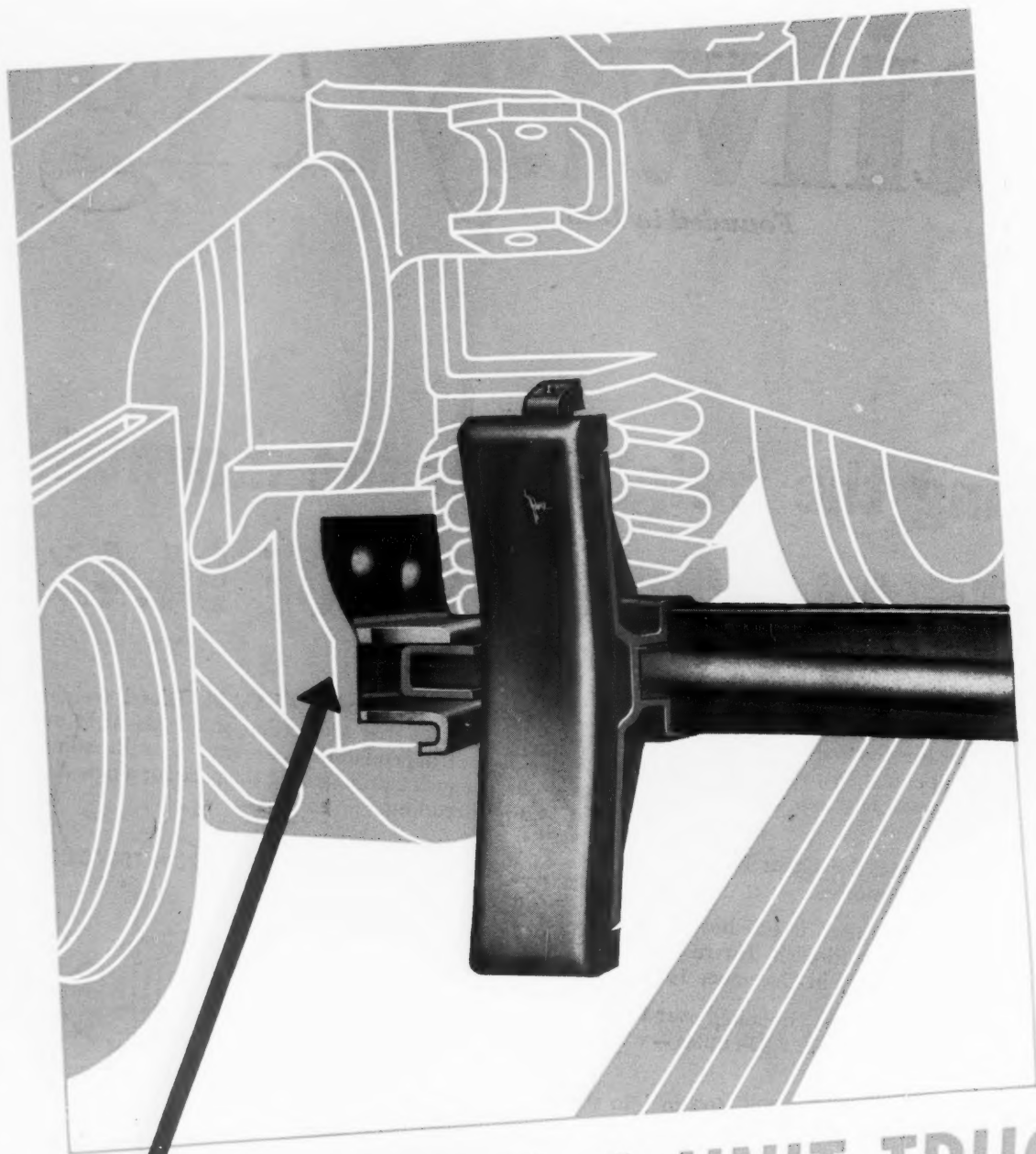
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In This Issue

Color Dynamics Enters Railroad Field 138

The Chesapeake & Ohio experiments show that a paint job of carefully selected contrasting colors can make indoor working conditions more attractive.

Diagnosis of RRs' Public Relations Task 142

The railroads must demonstrate the economic unbalance of our present transportation set-up to the public if they want fair competition among carriers. To do this more adequate public relations staffs are needed, and the interest of all railroad men.

Symposium on Passenger Car Design 147

A. S. M. E. forum on passenger-car design brings car department officers, traffic men, and car builders together in an open discussion of factors influencing car construction.

EDITORIALS

| | |
|--|-----|
| Investigation of Railroad Trusteeships | 135 |
| A Public Relations Report to All Railroads | 136 |
| Up in the Air | 136 |
| A New Role for the Railroads | 137 |
| Streamlined Fixed Properties | 137 |

GENERAL ARTICLES

| | |
|---|-----|
| Color Dynamics Enters Railroad Field | 138 |
| Diagnosis of RRs' Public Relations Task, by Robert S. Henry | 142 |
| Changes in Alco Top Executives | 146 |
| Symposium on Passenger Car Design | 147 |

COMMUNICATION AND BOOK 153

GENERAL NEWS 154

WITH THE GOVERNMENT AGENCIES 160

REVENUES AND EXPENSES OF RAILWAYS 174

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Investigation of Railroad Trusteeships

There is great need for the investigation of railroad trusteeships which it has been announced will be made by Senators Wheeler of Montana and Reed of Kansas. The U. S. Supreme Court said in an opinion on April 1, 1935: "The delay and expense incident to railroad receiverships and foreclosure sales constitute probably the chief reasons which induced the passage of section 77; and to promote the perpetuation of these evils under this new legislation would be subversive of the spirit in which it was conceived and adopted."

The *Railway Age* asserted in an editorial in its issue of January 14, 1945: "Few constitutional acts of Congress ever have more completely failed to accomplish their purposes than the act of March 3, 1933, and especially that part of it amending section 77 of the Bankruptcy Act." This paper showed at that time, by contrasting receiverships under previous law with trusteeships under section 77, that there had been not only "perpetuation" under section 77, but a great increase of the evils it was intended to abolish. Its administration by the Interstate Commerce Commission and the federal courts has resulted in wholesale transfers of property from some railway security-owners to others, involving plain confiscation; and numerous railroads have been kept in trusteeships so long and at such expense as to make the receiverships of the good old days seem by contrast the height of expedition and economy.

Nor, according to the Chicago Sun, are these the only criticisms that can be made of some trusteeships. The Chicago Sun is an ardently New Deal paper which can be held financially responsible for anything it says, it being owned outright by Marshall Field, one of the richest men in the world. And the Sun recently has been publishing a series of articles charging that a federal judge has been allowing a trustee appointed by him to use his position in various ways to promote the business interests of the trustee himself and of other persons and companies. The Rock Island has two trustees. One was appointed by a federal judge who has retired. A federal judge who owes his position to the late President Roosevelt appointed the other trustee; and it is this federal judge and the trustee appointed by him who are under fire from the Chicago Sun.

The *Railway Age* knows little of the merits of the charges made by the Chicago Sun. But the *Railway Age* has known enough about the passing back and forth between commission and court of plans for the re-organization of the Rock Island to feel sure there has been no justification for the long continuance of the Rock Island in trusteeship.

Perhaps there has not been in the Rock Island case any abuse of judicial authority and discretion. But the reports published regarding the conduct of the judge now in control of that railroad and of the trustee appointed by him plainly demand thorough investigation. Certainly as high standards in the performance of their duties should be demanded of federal judges and trustees as are demanded of the officers of railway corporations. And, whatever abuses there may have been in the railway management in the past, it would ruin any officer of a railway to have broadcast and proved against him now such charges as are being published regarding the federal judge and one of the trustees in the Rock Island case.

Senators Wheeler and Reed can render a service to the public, and incidentally to railways and owners of their securities, by turning the light on all commission and court proceedings under section 77 and ascertaining and reporting why many of them have been dragged out so long and to what extent they have been used for the confiscation of property and for other purposes not intended by Congress.

A Public Relations Report to All Railroaders

There are many railroad men whose professional success has been retarded, not by their lack of ability or application, but because, unfortunately for them, they happen to be working for the wrong railroad. Their environment, that is, has been unfavorable to their advancement to the full measure of their capacities. In exactly the same way, the environment of every person on the railroad payrolls, from chief executive to track laborer, was unfriendly to maximum opportunity during the decade of the '30's because the entire railroad industry was, relatively speaking, behind a political eight-ball as compared to other agencies of transportation.

There is good reason, therefore, why every railroad man in his own self-interest should concern himself with being informed regarding at least the general outline of the railroads' present public relations situation and its future prospects; and as to what, if anything, the individual railroad man can do to improve this situation. Such intelligent interest in the railroads' public relations is by no means general among railroad men—although the degree to which these relations improve or deteriorate during the next decade or less may mean the difference between remunerative jobs and unemployment for thousands of railroad men; and, for thousands of others, the difference between a vista of continuing promotion and hopelessness of further advancement.

"What Every Railroad Man Ought to Know About Public Relations, for His Own Self-Interest" might well be the title of an article on another page in this issue by Robert S. Henry, assistant to president of the Association of American Railroads. Mr. Henry, as most *Railway Age* readers know, is the chairman of the A. A. R. advisory committee on public relations. Not long ago, for the benefit of this committee in its deliberations, Mr. Henry wrote a long and candid analytical survey, based on important facts which are not widely realized in the railroad industry, which set forth: (1) just where the railroads stand in public esteem now; (2) the specific steps they can take to improve their standing; and (3) the practical effect on the fortunes of the industry and those engaged in it of success or failure in this effort.

The editors of this paper, having had long experience in dealing with public relations questions as they affect the railways, recognized Mr. Henry's report to the advisory committee as a document which should arouse the keen interest of every alert railroad man, and we asked him to make a condensation of it for publication in *Railway Age*. The article in this issue is the result.

The evidence and reasoning which Mr. Henry presents lead overwhelmingly to the conclusion that *the means are readily available to the railroads for overcoming all the handicaps they have suffered from unfriendly and unfair treatment*, relatively to other transportation agencies, from state and national governmental bodies. But public relations is not merely publicity—"pieces in the papers"—and, consequently, the installation of a competent public relations officer with an adequate staff on each railroad cannot, alone, do the necessary job. Unfortunately, relatively few railroads have taken even this step in a really thoroughgoing manner.

Every railroad man owes it to his own future to read Mr. Henry's challenging report; and then to look about his railroad to see what he can do to improve conditions in the direction which, so plainly, they need improving; and with rewards as large as they will be certain.

Up in the Air

E. P. Lott is an authority on airports. Recently, he delivered an informative address on the subject before the Western Society of Engineers. The numerous railway engineering officers in attendance were enlightened as to what an air terminal in a metropolitan center means in the way of space and design. The railway concept of terminal requirements, a few acres bought and paid for with private capital—and subject to taxes—was put to shame by the fancy figures of the "need" for 7,000 acres for an airport in Chicago and the expenditure of \$63,000,000 of public funds to complete said airport.

Ralph H. Burke, chief engineer of the Chicago Park Commission, supported Mr. Lott. The way those two gentlemen bandied about their figures of millions—taxpayers' money, in a city which has just announced an increase in taxes to the highest level in history—was reminiscent of the late President Roosevelt at his munificent best.

What is it that the air lines, private corporations organized for profit, want the city of Chicago to do for them? All they ask is a simple little facility, financed with taxpayers' money, which will accommodate 240 planes per peak hour. On top of that modest demand, the city will be called upon to assume the expense of relocating two important through traffic arteries, requiring motorists to add half a mile or so of circuitous travel to skirt the proposed super-airport. As a further minor requirement, one railway, and possibly two, will have to relocate main lines to give the airport additional breathing space. Another little item, accepted by Messrs. Lott and Burke quite as a matter of course, is the stipulation that 53 industrial buildings in the vicinity will have to have 20 to 150 ft. chopped off their tops to permit planes to glide into the port at the proper landing angle. That isn't all, though. The project, Mr. Lott explained, would not be acceptable to the air lines unless the city agrees to build a super-highway, some 12 miles long, between the airport and Chicago's business district.

Recently, in Chicago, a group of railways entering the city from the south and west formed a committee to consider the construction of a joint passenger terminal, as an entirely private undertaking. This committee has been badgered and harassed by city officials, who are, however, quite complaisant when an airport committee comes along to propose a facility to compete with the railroad terminal and which doesn't even draw up its own plans, but relies on city engineers to do the job.

The railway committee proceeds on the assumption that private funds will finance the improvements it undertakes. The air lines' committee has no such old-fashioned notion. Not only does it demand the expenditure of millions on the part of the city for the airport itself, but it also stipulates that the taxpayers

must also build a super-highway to serve such an airport. Ex-Mayor La Guardia of New York has approved the expenditure of millions for the Idlewild airport in Jamaica bay, why can't Chicago be equally generous? Since one is born every minute and New York is a big one, can Chicago be content to be less?

Mr. Lott, in his speech, overlooked short-haul traffic, but Mr. Burke, employed by the city of Chicago, made up for this oversight. He explained that the city could easily spend eight or ten millions for a single air strip in downtown Chicago which would enable the air lines to compete for the short-haul traffic. To anyone attending the meetings of both the railway terminal committee and the air terminal committee, the contrast was enlightening. The rail committee, bearing gifts, approached the municipal officers with their hats in their hands; the air lines came up with their hands out, and a better-be-quick-about-it attitude. The city recognized the difference in approach in a manner which might be expected in such times as these—when so much taxpayers' money is being poured into fixed transportation plant that those who cling to the old-fashioned idea of using private funds to provide such facilities find it hard, at times, not to be mistaken for chumps.

A New Role for the Railroads

Those who are familiar with the history of smoke abatement will recall how the railroads were long the object of attack by municipal smoke-abatement authorities as the principal source of atmospheric pollution. There can be no doubt that at the outset of the movement for better city atmospheric conditions steam locomotives were very much in evidence as smoke producers. Indeed, it was only after the efforts to reduce locomotive smoke had begun to take effect that the factory, the power plant, and the household heating stoves and furnaces, in the aggregate, were seen to be serious competitors of steam locomotives as producers of black smoke.

It is now a matter of interest to note that steam railroads have changed their role of the bad boy of atmospheric pollution to that of the expert adviser to municipalities on smoke-abatement problems. This they have done by way of the Coal Producers Committee for Smoke Abatement in which a group of coal-hauling railroads has joined with a group of coal producers to furnish technical advice to municipalities. This organization, with headquarters at Cincinnati, Ohio, is said already to have aided over a dozen eastern and central western cities in the solution of smoke problems. It has behind it the steadily accumulating results of work being done on numerous aspects of the contribution of coal combustion to air pollution by Bituminous Coal Research, Inc., the research agency of the bituminous-coal-mining industry. This work has already led to improvements in locomotive smoke elimination. It has also attacked the household heating problem, including hand-fired stoves and individual household furnaces, the aspect of the problem of smoke abatement most difficult to control.

Streamlined Fixed Properties

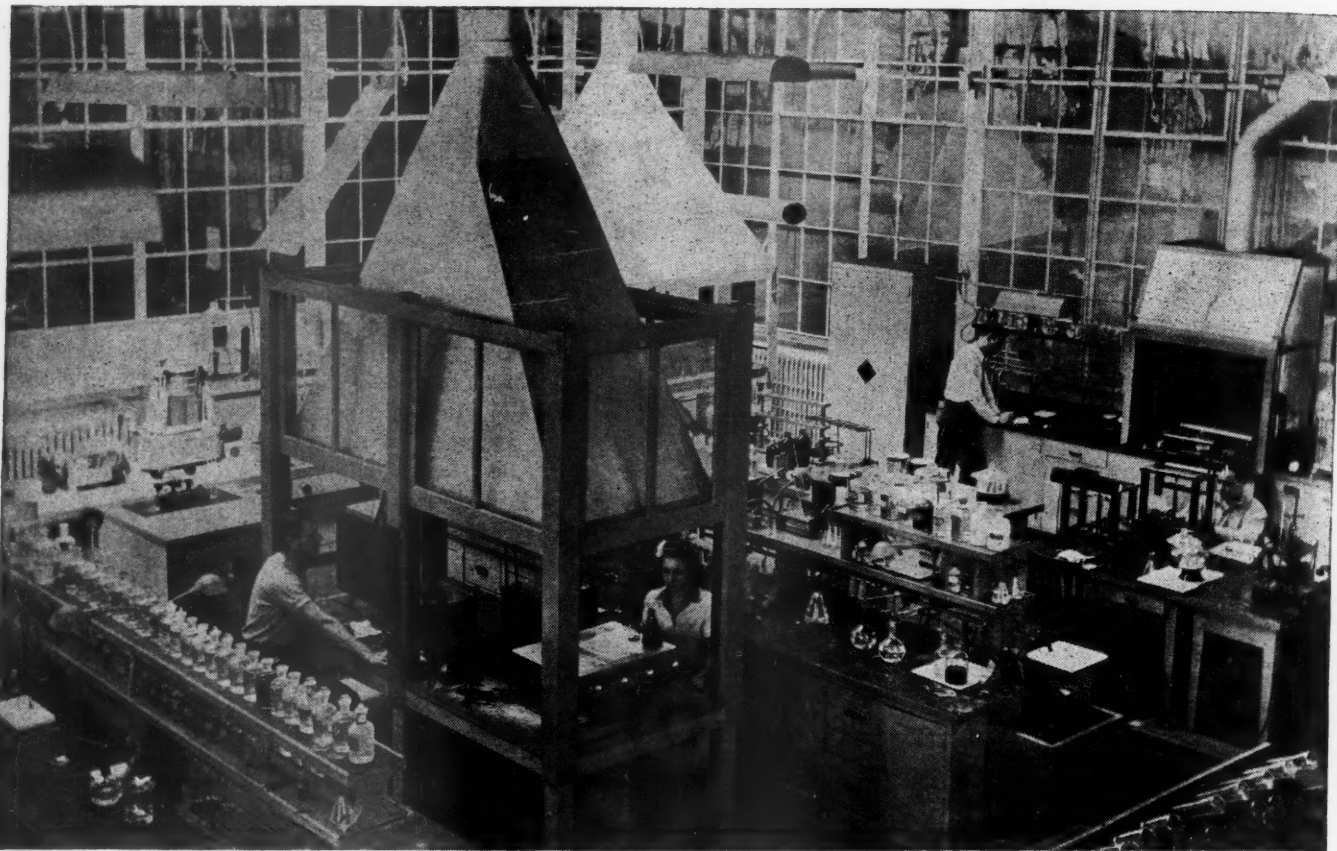
Passenger trains are not the only things on the railroads that are being "streamlined." To an increasing degree the railroads are becoming conscious of the need, also, for subjecting their fixed properties to a "streamlining" process, that is, one in which property units no longer needed are removed to reduce costs and secure other advantages. Originating during the depression, this movement gathered momentum during the war and gives every indication of continuing to be an important activity.

Opportunities for retiring property units are created largely by changes in operating conditions that have the effect of eliminating or reducing the need for them. The properties that are most commonly affected include passenger stations, shop buildings of all types, water stations and other locomotive servicing facilities, section tool houses, freight houses and related structures, and side and yard tracks. If continued in use after further need for them has disappeared, such facilities are a cause of unnecessary taxes and maintenance costs. Also, since structures that are no longer used are frequently older buildings of frame construction, their continued existence is objectionable because of the fire hazard involved. Furthermore, buildings or other facilities that are no longer used are frequently in a dilapidated condition, with the result that they not only have a down-at-the-heel appearance, but are apt to give the impression that the owner is lacking in general progressiveness.

If it is to be effective, any effort to do away with unneeded property must be conducted on a systematic basis, preferably involving the use of division or district committees for making the necessary surveys and recommendations. In addition to searching for facilities that have already fallen into disuse, such committees may well keep in mind the possibility of eliminating the need for certain facilities still in use by transferring their functions to other structures. Much is also to be gained by regarding the retirement program as a regular activity to be carried on from year to year on a more or less permanent basis. This is so because new opportunities for retiring property units are certain to be created from time to time incident to the changes in operating conditions that are occurring constantly on every progressive railroad, and which are likely to take place even more frequently in the future than in the past.

What can be accomplished when a railroad makes a determined and organized effort to retire unneeded property is shown by the experience of the Illinois Central, as related by C. H. Mottier, vice-president and chief engineer, in a recent article in the *Railway Age*. As the result of a special program conducted during the three years from 1942 to 1944, inclusive, this company retired 3,300 items of fixed property with a value of \$13,000,000. During the same period it filled 651 timber bridges with a total length of more than ten miles, and also abandoned seven unprofitable branch lines having an aggregate length of 154 miles.

No well-trained athlete would think of entering a contest carrying excess weight. In the race for supremacy in transportation the railroads will want to take care that they are not needlessly encumbered by the expense and other disadvantages of keeping in existence property that no longer serves a useful purpose.



Partial view of chemical laboratory—The wide variation in color treatment is restful to laboratory workers

Color Dynamics Enters Railroad Field

Discussion of the principles underlying this important development in painting and how it is being tried out in the laboratories of the Chesapeake & Ohio

THE Chesapeake & Ohio is trying out a practical application of the principles of color dynamics in its chemical and physical laboratories at Huntington, W. Va., maintained at this point as part of its test-department facilities, looking to a study of the advantages of this system of interior painting and to the feasibility of its application elsewhere on the system. For a number of years, in fact, since these laboratories were built, the interior decoration of the buildings had followed the usual practice of painting machines gray and of applying flat non-reflecting paint to the walls, window frames and steelwork. Work benches and tables, for the most part, were finished with dark oak varnish.

As might be expected with finishes so low in reflecting qualities, the laboratories presented a gloomy appearance, giving the impression of perpetually

cloudy weather outside. Today, through the application of color dynamics, the entire interior of these laboratories has taken on a brighter and more pleasing aspect, and the laboratory personnel is relieved of the mental and physical depression imposed upon it by the former drab and monotonous color scheme, with its complete lack of background and contrasts.

What Is Color Dynamics?

But before discussion of the experiment on the C. & O., what is color dynamics, color harmony or three-dimensional painting as it is called variously? What is its basis? What are the human reactions to it? Some of the proponents of color dynamics call it a new science; others describe it as a war-time development that is likely to have im-

portant effects in the industrial and building fields in the post-war period; still others see it only as an application of principles of color and their use which, they say, were already known, but which have not been utilized heretofore in the industrial field. In large part, these viewpoints express distinctions without a difference, while they by no means, either separately or collectively, describe what color dynamics is. It should be understood to begin with, however, that color dynamics is based upon the scientific study of human mental and physical reactions to color and color combinations.

In the past there have been many differences of opinion, and not a few misunderstandings, concerning these reactions, but students of human behavior have established beyond dispute that color does have a profound effect on the

human eye and nervous system, and produces an equally profound psychological reaction on the mind. These reactions are so definite that physicians have come to recognize the value of color combinations in the treatment of sickness, and are now using color to keep patients in a satisfactory frame of mind and free of apprehension. This treatment is reported as being of real assistance in promoting the comfort and recovery of patients in hospitals where it has been tried under the designation of color therapy.

In making these studies it was shown that certain colors tend to elevate the mind while others tend equally to blunt the nervous system and depress the mind, and that still others tend to create mental confusion. In fact, the mental and physical impact of color was found to be similar to that of sound, particularly of music. The discord of untrained musicians has a jarring effect, often to the point of physical discomfort. On the other hand, the harmony produced by a symphony orchestra can guide the mind through moods ranging from sadness to ecstatic happiness. Color harmony and color disharmony produce substantially the same mental reactions as music, with similar physical effects.

Starting with this background, further study revealed that, by using certain colors and color combinations, rooms could be made to look larger or smaller or to change their apparent shape. It was also discovered that by applying suitable colors to the exterior, the visual height of a building could be raised or lowered as desired. Progressing along this line, research led gradually to the development of a series of focal and receding colors that could be utilized on a scientific basis to accomplish certain desired results in industrial applications when correlated suitably with light.

Color and Muscular Reaction

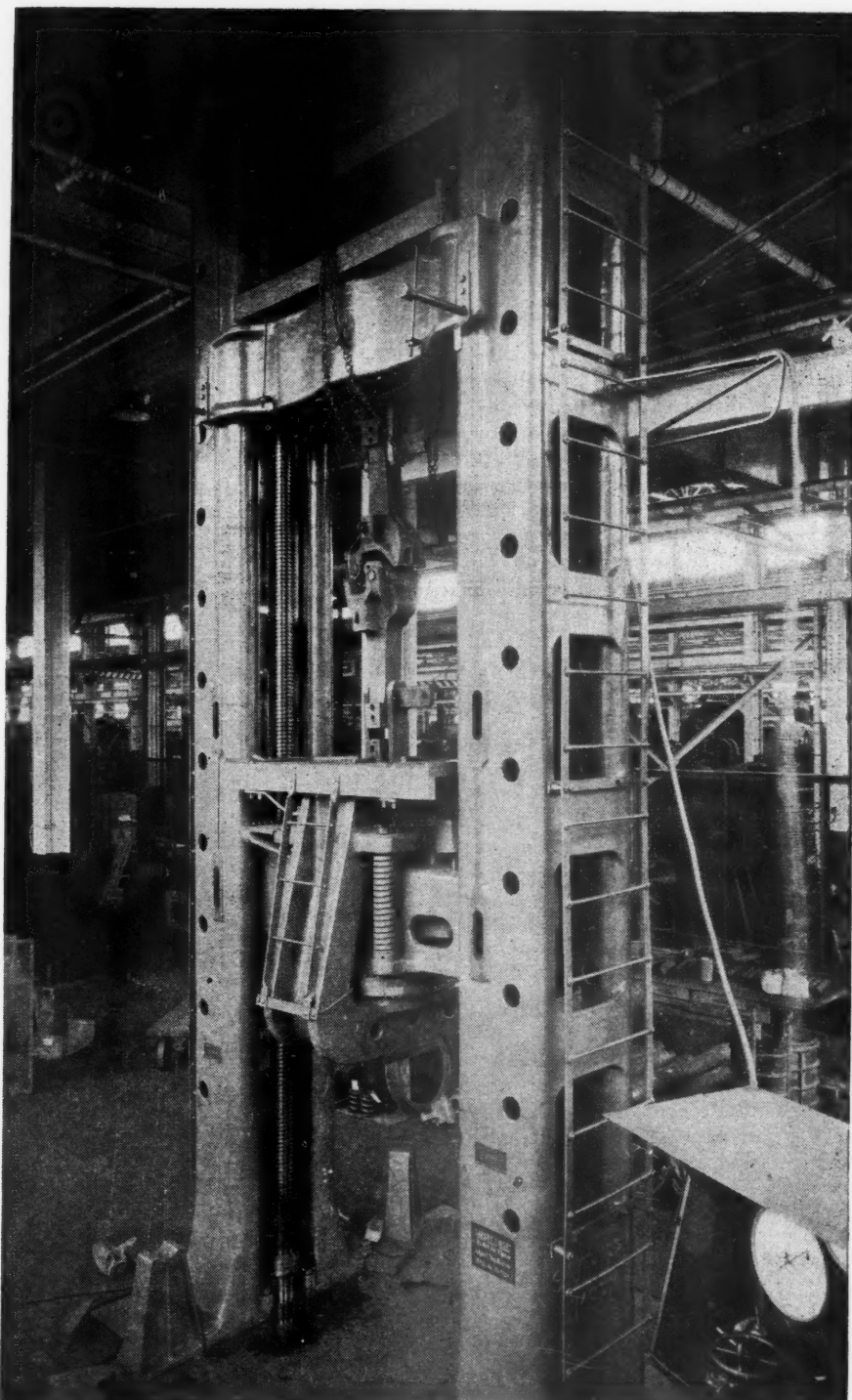
Many experiments have proved that the average person will judge weights to be heavier when they are placed under red light than when under green or blue light. In the same way, boxes painted a light color seem to be lighter in weight than the same boxes do when painted black. To determine whether this was merely imagination or was based on actual physical reactions to color, studies were made of the effects of color on blood pressure and upon mental, muscular and nervous activity. It was found that colored light has a pronounced effect on muscular reaction. In a typical case, muscular activity was recorded as 23 units under ordinary light, but increased to 24 units for blue, to 28 for yellow, to 35 for orange and to 42 for red. Research also revealed that red grows dim, but that blue and green become more pronounced when

the ears are exposed to loud noises, and that the same effects are produced by strong odors.

Again, the human eye is so constituted that it is able to receive impressions of all of the primary colors—red, blue and yellow. Yet, when the eye is fatigued by constant concentration on any one of these colors, and the vision is then transferred, the eye cannot see white, which is composed of all of the colors of light. Under this condition the eye is blinded by the rays of the one color and can distinguish only the total

of the remaining primary colors. In other words, if the vision is concentrated for several minutes on a section of red and is then shifted to a white surface, the eye will not see the white, but only a combination of the two colors blue and yellow, or green, which is the complementary color of red.

Along with the study of color itself, equally important studies were made with respect to the correlation of light and color in the industrial field. Every surface absorbs some of the color waves that impinge upon it and reflects the



This huge testing machine has body of vista green, while crossheads are focal yellow

others, thus producing color effects upon the eye. White objects reflect a large part of all of the colors, while black surfaces absorb them. One of the simplest, yet most convincing, demonstrations of the close relationship of color and light is to place a piece of black thread upon a black cloth and attempt to distinguish the thread. Under normal conditions it requires a light of 2,100 foot-candles to see the thread, although a white thread will be equally visible on the same black cloth under an illumination of only one foot-candle.

Lighting Usually Inadequate

For many years, factories, shops and other places where men work indoors in the industrial field have been painted with little or no regard to the co-ordination of illumination and color, and the practice in railway shops and other facilities has been little or no different from that in industry. Usually, the lighting has been inadequate and, in an effort to correct this defect, instead of providing more light, in many cases the non-reflecting paint on the walls and ceilings has been replaced by glaring white, usually glossy paint or whitewash, in the mistaken idea that this would improve the lighting and increase production. As a matter of fact, instead of improving conditions, and thus increasing production, this practice actually did the reverse, because it was injurious to the workers' eyes and caused fatigue.

It has been a practice of equally long standing to paint machines gray, in many cases of a shade approximating that of the metal being worked. Under these conditions it is difficult for the machine operator to distinguish clearly where the machine leaves off and the metal begins, without straining his eye muscles and nerves. When he raises his eyes for relief, he encounters substantially the same shade of gray or a glaring white on the walls, and thus receives no visual rest. In fact, where the walls are painted white, the impact on the eyes causes a jarring of the nerves.

Reflective Power of Colors

Without a knowledge of the facts that have been given, it is neither possible to work out a scheme for color harmony or color dynamics, nor to understand why certain color combinations are effective while others are failures when applied to industrial operations. Even with this knowledge it was not possible to work out a practical detailed scheme of color harmony, and extensive experiments became necessary to determine the relative reflective power of different colors or color combinations that might be suitable for shops and other places where men work on machines and at benches or tables, with a view of reflecting 75

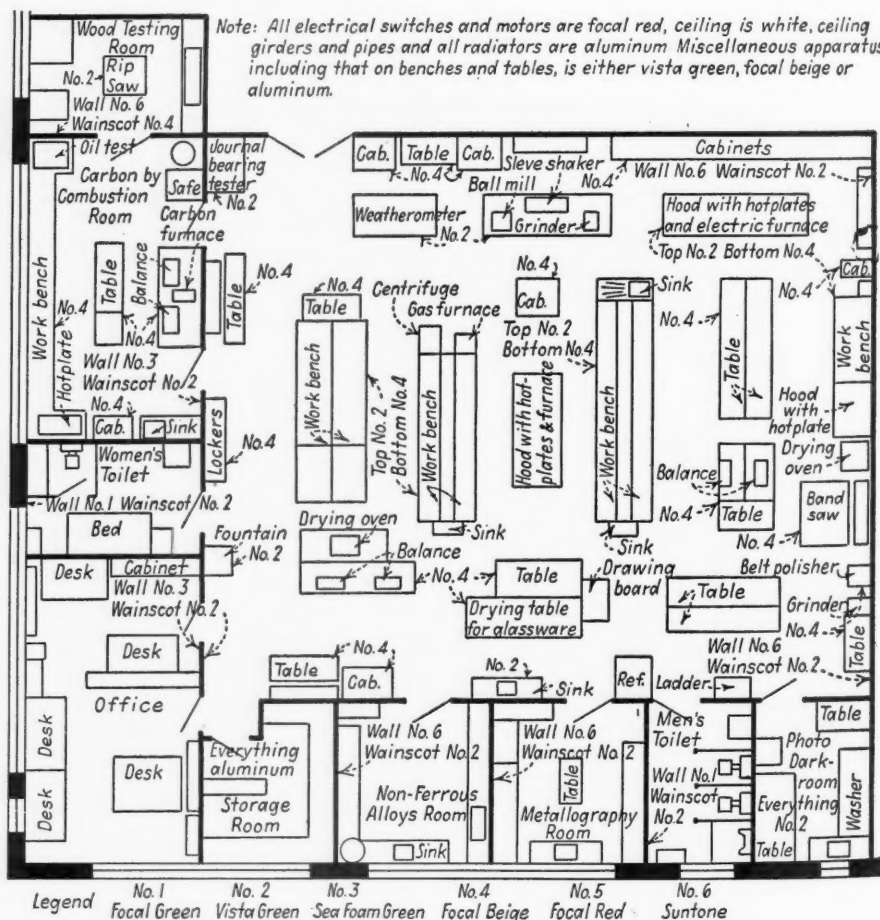
per cent of the light rays from the ceiling to the working areas and from 50 to 60 per cent from the walls, with correct distribution and no loss. In these experiments it was established that white reflects from 85 to 92 per cent of the light rays; ivory, 74 to 79 per cent; yellow, 66 to 72 per cent; orchid, 70 per cent; peach, 69 per cent; light buff to cream, 68 per cent; light blue, 66 per cent; light green, 62 per cent; beige, 38 per cent; and light gray, 56 per cent. These values remain almost constant under indirect, semi-direct, direct and natural lighting.

It was also revealed that green is the most restful of all colors, under any type of illumination. The colors that can be identified most readily under various types of lighting are yellow, orange and blue, yellow being the most visible and the orange the most attention arresting. Black on yellow is the most legible, but not necessarily the most satisfactory, color combination for any type of lighting. This is followed in order of visibility by green on white, blue on white and white on black. Theoretically, the last mentioned represents the ideal combination, since these colors stand at two extremes. This combination is not satisfactory in strong light, however, because the white, having a high reflecting index, tends to blur the vision.

All colors are affected by light, and some of them are of material assistance in illumination because they possess greater reflective and diffusive power than others. In general, the light from incandescent lamps does not interfere with color selection, although it tends to reduce the intensity of color.

Daylight fluorescent lamps produce a light that carries blue rays, making it most satisfactory for use with blues, blue-green, green and blue-violet. Other colors when used with this type of lighting will appear to have a small amount of blue pigment added, for which reason those in the orange range are not suitable with this type of lamp, for, since orange is the complement of blue, they will present a muddy appearance. The white and soft-white fluorescent units produce a warm light tending more toward the red, with the soft-white lamp producing the warmer hues. This characteristic makes them adapted for use with warm colors, such as ivory, cream, beige, rose or tan. No shade of green should be employed with this form of illumination, for, since green is the complement of red, it will become a dark gray.

The knowledge gained by these apparently disconnected lines of research was given practical application on a relatively small scale in the industrial field



Floor plan and color scheme for walls and apparatus, chemical laboratory, test department, Chesapeake & Ohio, Huntington, W. Va.

Diagnosis of RRs' Public Relations Task

Fundamental troubles of industry will vanish only if, holding on to war-time increase in public esteem, carriers present their case persistently and skilfully—Few individual railroads adequately staffed, publicity outlays are low

CORRECTION of the deeply ingrained and not always clearly understood inequalities in present public policies as to transportation is bound to be a gradual process, taking one thing at a time, step by step. One of these steps, and one of the most essential, is to secure widespread understanding of the fact that it is in the public's own interest to establish such policies as will enable the railroads to work for the public under conditions of equality of treatment and opportunity, and so to gain popular support for the steps necessary to create healthy conditions in transportation.

Essential First Steps. To secure such an understanding is a major end of the railroad public relations program, but, before undertaking that, other steps had to be taken. The first was to replace the once prevalent impression that railroads were outmoded, obsolescent, non-progressive, inefficient and largely the authors of their own difficulties. That could not be done with the mere negative of denial. It had to be done by the positive substitution of another impression of railroads—as efficient, enterprising, competently managed, and doing a better job than most people realized.

The industry started to work on that job in the summer of 1936. By the time of the outbreak of war in Europe, a little more than three years later, enough confidence had been built in railroads and railroad managements to disappoint those whose idea when war began was that the railroads would be taken over by the government. Even then, however, there still remained enough of the former lack of faith in railroads that 45 per cent of a representative sample of the population queried in a survey of public opinion said they thought, if we should get into the war, that it would be a good thing for the government to take over the operation of the railroads.

The record of the war years—plus the fact that public attention was persistently directed both to this record itself and the conditions under which it was accomplished—did a great deal for the industry in completing the restoration of public faith and confidence in our privately operated railroads.

All this makes a fine foundation for the next step, but it cannot be taken for

By ROBERT S. HENRY

Assistant to President, Association of American Railroads

granted that the foundation will remain unimpaired. No matter what else may be done hereafter, therefore, this high opinion of railroad competence and enterprise must be maintained by continuing to keep before the ever-changing public the facts about railroad performance and accomplishments which justify such a reputation.

The Next Step. But, if the public is convinced and is kept convinced that the railroads are doing a good job, and are

10 Years' Progress

Ten years ago, in November, 1935, the membership of the Association of American Railroads authorized a cooperative program to bring about a better public understanding and appreciation of railroad progress, achievements and problems. Before such action was taken there had been a year of study in the offices of the Association. After it was taken, there was another six months of study and preparation, with the outside assistance of an experienced advertising agency. The first of the Association advertisements, marking the public launching of the program, was published in June, 1936. The program then inaugurated has been carried on since by the Association, by the railroad companies, by the regional organizations of railroads and by many individual railroad men. Among students and observers of the growing movement for better public relations in business, the program has received wide recognition as probably the outstanding effort of the sort by a whole industry acting through its industry-wide organization.

The article herewith is abridged from a report on progress and plans presented to the Association's Advisory Committee on Public Relations by Mr. Henry, who is the committee's chairman.

at work as determinedly and rapidly as conditions permit to do the better job which is expected of them, there is a basis to go on to the next step, and to talk about broader and more fundamental questions of the structure of our transportation system—

(1) The essential part of railroad service in the very lives of all the people of the nation,

(2) The source and nature of the investment which created in American railroads the world's greatest transportation system,

(3) The necessity for the continuance of this investment if the nation is to have transportation adequate in war and in peace, and

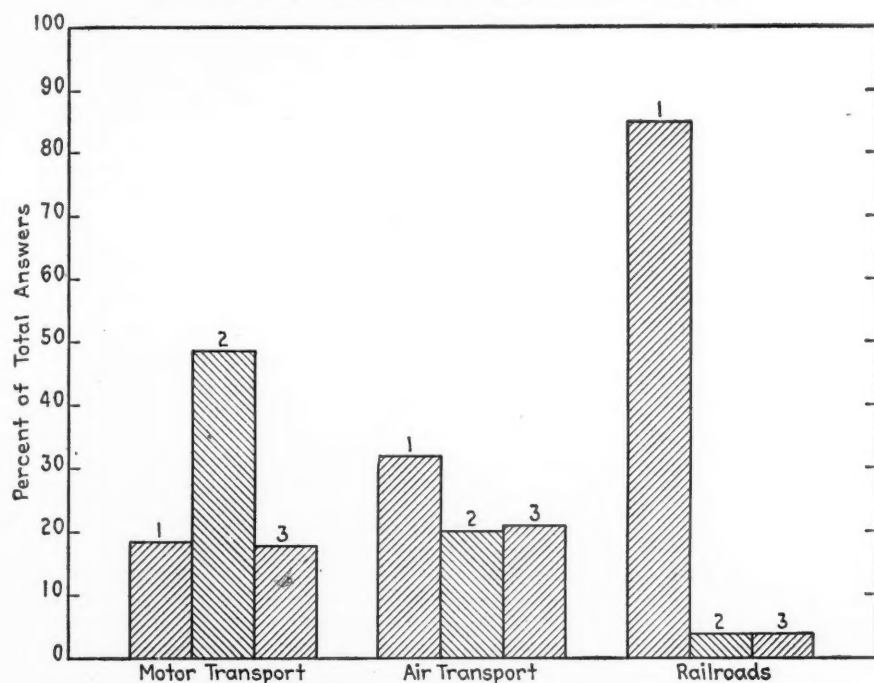
(4) The conditions of equality of treatment and opportunity which are necessary to assure such continued investment of private capital in self-supporting, tax-paying, business-operated railroads.

A start has been made in that direction. Almost nine out of ten of the people queried in the latest survey of public opinion say that railroads are the most important form of transportation, an opinion which was expressed five years ago by only six out of ten. Almost all people queried say that they believe all forms of transportation ought to be treated on a basis of equality.

But a majority of the people interviewed believe that this condition of equality prevails today. When asked about public aids and subsidies, there were more people who thought that railroads had received the "most help" from government than there were who felt that way about any other form of transportation. Such an opinion, erroneous as it is, reflects vague and imperfectly understood recollections about "land grants," "government loans" and "government business" aid extended to railroads.

A majority of the public, moreover, is willing to have public money spent for airports and airways, for waterways and highways, feeling that such "ways" are for the public use and benefit. The majority does not express this feeling as to railroad tracks and terminals which, in the common opinion, are for the use and benefit of the railroads alone.

Literature About the Several Forms of Transport Offered Free or at Low Cost for Distribution in Schools



1. Percentage of literature furnished by transportation industries themselves
2. Percentage furnished by suppliers of transport equipment and materials
3. Percentage of literature furnished by governmental agencies

(Source: Analysis of 13 listings of educational material—percentages do not total 100 because additional items are offered by other groups)

In these confused and contradictory feelings there seems to be, first, a failure to separate the interest and use of the operator of commercial service on the airways, waterways and highways from the interest of the private citizen who uses them, not for business but for his own individual purposes; and, second, a failure to realize the essential public interest in and benefits from adequate and dependable railroad service rendered by sound, strong, privately operated railroads, which not only add nothing to the burden of taxes but also make major contributions to the public treasuries.

To correct these erroneous impressions will be neither an easy nor a quick job. Such opinions run back a long way. They are, in part, the result of ancient antagonisms and misunderstandings, many of which came to be embalmed even in the school textbooks studied by two generations of Americans. These impressions are, in part, the result of the appeal of the new and promising, as against what to the casual eye seems to be the old and static. They are, in part, the result of a curious "blind spot" in the thinking, even of business men, when it comes to transportation.

It is traditional in this country that the government—federal, state or local—provides highways and waterways, including both channels and harbors. It is natural, therefore—with the development of new forms of commercial use

of highways and waterways, and then of airways, requiring investment of public funds on a wholly new scale—that there was public acceptance of such expenditures as an obligation of government, without any clear public thinking about the difference between private and individual use of these facilities and their use for commercial transportation.

Opinion survey polls show, moreover, that the public wants highways and airways and waterways. They want them for the operation of their own motor cars, or pleasure craft, or the personal planes to which many look forward. They do not understand, for the most part, that investment of an entirely different order, and for an entirely different purpose, is involved in creating highways, waterways and airways for large-scale commercial operation.

The Futility of Mere Opposition. All of this indicates that it would be futile merely to oppose such developments or to allow the impression to be created that the railroads are opposing them. No more can be done than to bring about a public understanding of the nature of the contribution made by the taxpayers to the commercial users of these facilities, and a public opinion that such users should pay adequately for the investment and operating costs which their use imposes upon the public treasury.

To accomplish that much would be a notable achievement in progress toward

sound public thinking as to transportation. It cannot be done by a merely negative approach, in opposition. It requires such an approach and presentation as will convince people that what the railroads seek is in the public interest, as distinguished from the particular interest of railroads.

It is a goal which cannot be achieved by even the ablest and most convincing logic and appeals to reason, important as those are. While wide public acceptance of ideas may be based ultimately upon fact, most individuals have neither the interest, the time, nor the inclination to absorb and consider facts about the other fellow's business. Their judgment is formed and their action is taken from impressions.

The public impression of railroads today is favorable. The people have seen a demonstration in the test of war that this country cannot do without them. The impression that there is nothing in existence, or in sight, to take their place should be preserved. The public has seen a demonstration that railroads, under private operation, are able to do tremendous transportation jobs under difficult conditions, and that, when emergency came, it was to its railroads that the nation turned. That impression should be kept alive.

For the future, we need to strengthen the impression that railroads are continually improving their technology through research and invention. We need to strengthen the understanding that the investment of private funds in improved railroad plant and equipment made possible the railroads' remarkable record in the war, and that such investment is necessary to make possible the sort of railroad performance the country wants and must have in the future. We need to enlarge the number of those who realize that this private investment in self-supporting, tax-paying railroads cannot be expected to continue always if it is to be forever subject to increasing competition with commercial transportation which has the advantage of the use of government-created and government-maintained facilities without paying reasonable charges for such use.

Such are, in substance, the impressions we should seek to create and enlarge. There are countless facts to support them, and there are many ways to present such facts to the public. The public relations task of the industry is to use these ways for presenting facts—and to keep on doing it, in varied form, over and over again.

A Job for the Whole Industry. Such a program, it should be emphasized, is not a matter for the Association of American Railroads alone. It calls for the active participation of all railroads. Nor is it a matter merely for the public relations officers of the railroads and

their staffs. It calls for the interest and assistance of railroad officers and men of every department.

Such a program must reach not only one vast and vague public, but many groups within the public. Railroad men themselves are one of these groups, and the most important group of all—for it is through railroad men that the most effective contacts are made with the others. If the goal of equal treatment and opportunity for railroads is to be reached, railroad men themselves must understand the situation and must help to spread that understanding.

Railroad Advertising. There is no way of communication so effective as the direct personal contact of an informed and enthused railway man with an interested outsider, but to put the facts before great numbers of persons, it is necessary to have recourse also to some or all of the three great mass means of communication—the press, the radio and the moving picture.

As an industry, the railroads have not been extensive users of the proved power of advertising, either when considered in relation to the size and importance of the industry itself, or in comparison with what is done by other forms of transportation. A single air line, for example, having operating revenues of only a little more than \$30,000,000 in 1943 (the latest year for which the comparison is available), spent more for advertising and publicity than did all of the thirty Class I railroads in the Southern and Pocahontas regions combined.

If the railroad industry as a whole spent as much, in proportion, for advertising and publicity as the domestic air line industry, its budget for those purposes would be more than \$300,000,000 per year, instead of the less than \$15,000,000 which it actually is. Even putting the comparison on the basis of passenger revenues alone, railroad expenditures would have to be approximately \$85,000,000 per year to match air line expenditures for these purposes.

Advertising and publicity expense of motor bus lines in the same year 1943 were more than 74/100ths of one per cent of revenues, and by motor truck freight lines were 27/100ths of one per cent, as contrasted with expenditures for like purposes by railroads of less than 14/100ths of one per cent, to which might be added expenditures of the A. A. R. for public relations and advertising of slightly more than 1/100th of one per cent of railroad revenue.

Railroad expenditures for such purposes include advertising in newspapers, chiefly by the railroad companies, and in general magazines, farm publications, business magazines, and youth and educational magazines, chiefly by the Association. The other great mass medium of advertising which, by reason of its broad national coverage, would seem to

be especially suitable for use by the Association is network radio broadcasting.

Radio broadcasting offers difficulties not to be found in magazine advertising in that the advertiser must provide not only his advertising appeal and message but must also, in his program, provide the equivalent of the interest and entertainment afforded by the editorial content of magazines or newspapers. Radio, on the other hand, has been found effective in reaching great numbers of persons. The problem, if the Association is to use network radio, is one of finding a program appropriate to the industry and of providing the necessarily large appropriation to cover its cost.

The Next Generation. For the most part, the program of advertising, information, posters, public addresses, motion pictures and other material produced and used by the railroad industry addresses itself to the adults of today. But there are still more important people to be addressed and interested—the young people, who, at the rate of 2,500,000 a year, are reaching maturity and taking their places in the world. In reaching these young people with their story, the railroads have the advantage of whatever it is that makes everybody like to watch the trains run. This interest in trains, however, must compete with many another fascinating subject, including the newest of them all, the airplane, which has been so greatly glamorized by war.

In addition to the natural interest so excited by air transportation, the Civil Aeronautics Administration and the United States Office of Education, both

agencies of the federal government, have joined forces in an "all-out drive to 'air-condition' American youth, by stimulating aviation education in elementary schools and high schools."

One of the direct results of this program, which has been under way for three years, has been the introduction of aviation courses in approximately 14,000 of the 28,000 high schools and junior high schools in the United States.

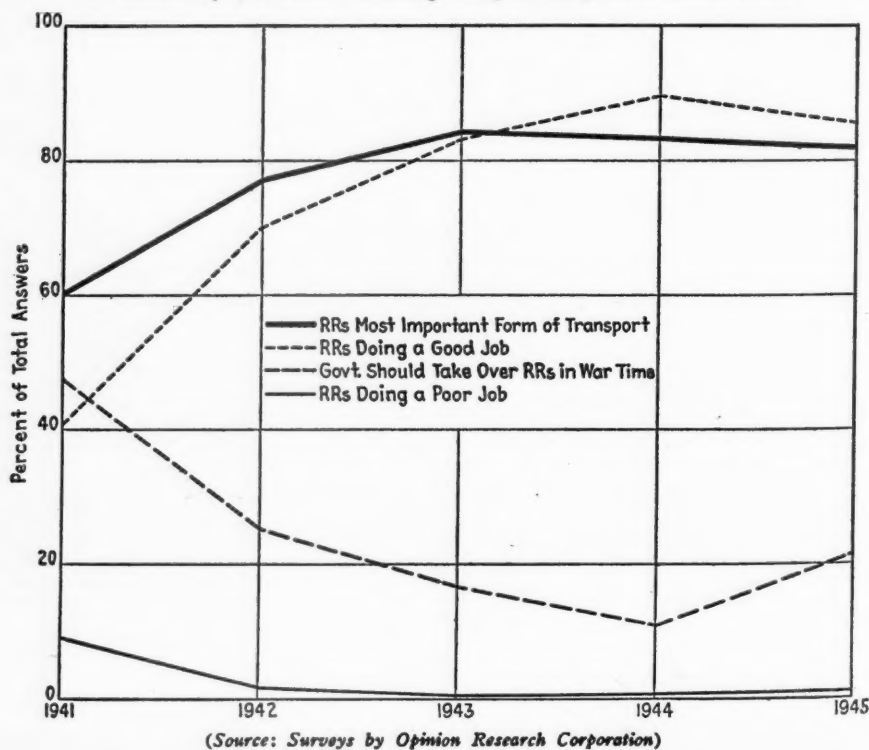
The agencies of the federal government have also promoted the "Air-Age Education" series of sixteen school textbooks, and the preparation and publication of an encyclopedic "Source Book of Aviation Material for Elementary and Junior High Schools." From this work, prepared at the expense of the Civil Aeronautics Administration by a special staff of educators working at Stanford University, writers of school textbooks on such diverse subjects as history, geography, mathematics, composition, spelling, physics and chemistry may obtain data, including maps, graphs and illustrations, for inclusion in their works.

Besides the promotional work of the federal government and the commercial air transportation companies, interest in air transportation is further stimulated by the activities of the producers of airplanes and parts, fuel, lubrication and other aviation supplies.

When it comes to railway transportation, the picture is quite different. *The federal government is doing nothing to promote the study of railway transportation in schools and colleges.*

The extent to which air transportation is being promoted by others than

Trends of Public Feeling Regarding the Railroads



the air transportation companies themselves is indicated by a study of the listings of free and inexpensive materials available for school use and extensively used by teachers, librarians and others. An analysis of 13 representative lists of this sort shows that 85 per cent of all the items dealing with railway transportation came from the railway companies themselves or their trade associations, with only 3 per cent of such listings issued by government agencies, and another 3 per cent by the railway supply industry. On the other hand, the airline companies and their associations produced only 32 per cent of the listings available under the heading of air transportation, and motor transport companies and their trade associations only 18 per cent of the available material on highway transportation, with government agencies and the suppliers of equipment and materials providing most of the balance.

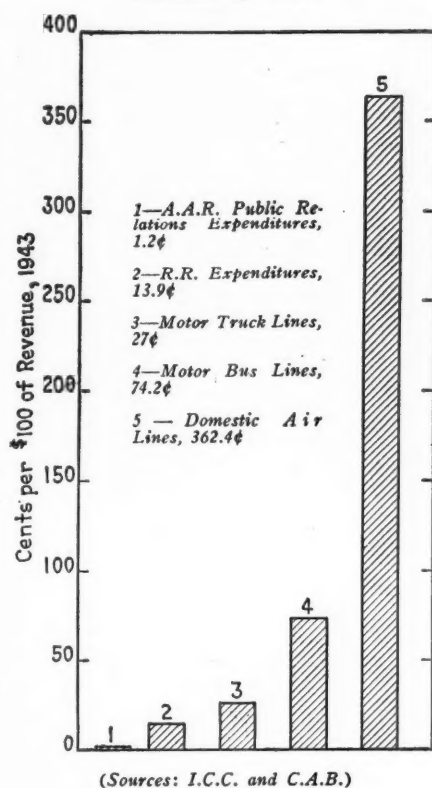
The public relations program of the Association of American Railroads includes the production and distribution of literature and information to fill the numerous requests received, largely from schools and colleges. Such requests and inquiries received by the Association direct (not counting those which are received by individual railroads or the regional organizations) come from approximately 50,000 persons a year.

Major items of material made available for school use, either by the A. A. R. direct or for distribution through the regional organizations or individual railroads, include the *Teacher's Kit for a Study of Railway Transportation*, of which more than 300,000 copies have been put in the hands of teachers; *Railroads at Work*, a pupil's booklet designed to be used with the "Teacher's Kit," of which about 1,000,000 copies have been distributed in the past twelve months; the well-known *Quiz*, containing 450 questions and answers on railroading, the distribution of which has exceeded 1,175,000; *A Bibliography of Railway Literature*, of which more than 400,000 copies have been distributed, and a new booklet, the *Development of Railroad Transportation in the United States*, distribution of which is now beginning. These are to be supplemented during the coming year by a new booklet on *Railroad Research*.

The above is in addition, of course, to the widespread use by schools of A. A. R. and other railroad motion pictures. Several major school systems have requested that there be assigned to them permanently prints of *Life Line of the Nation*, the first A. A. R. motion picture, and arrangements are being made to do so.

It is anticipated that, with additional subjects available in 1946, the use of railroad motion pictures in the schools will be greatly stimulated.

Advertising and Publicity Expenditures per \$100 of Revenue, 1943



The Immediate Need. Vital as is this fundamental and long range task of putting information about transportation into the hands of the young people growing up, there is a more immediately pressing need to continue, enlarge and intensify the effort to attain now that better public understanding and appreciation of railroad progress, achievements and problems which the industry set up as a goal ten years ago.

Progress, much progress, has been made toward securing the first two of these objectives. There is a better public appreciation of railroad progress and achievements. That better appreciation must be preserved while the industry seeks the third point in its program—a better understanding of the problems of railroads as the essential heart of the transportation system upon which the very life of the nation depends.

In seeking this result, there is an important place for the work of the Association of American Railroads, telling the general railroad story to the public of the nation, largely in media which circulate nationally, and furnishing information and material for use and distribution by others interested. The Association must of necessity, however, deal with "least common denominators" which apply to the industry as a whole. There is a larger and more important place for the individual railroads and their regional and state organizations, telling the story of what railroads do and

what they contribute, with all the added power and effectiveness which local illustration and concrete example can give. There is a still greater opportunity in the hands of the individual railroad man and woman, whose real interest in sound and equal treatment for all forms of transportation is second to none.

Securing the sort of understanding and appreciation which is sought will not settle railroad problems. It will not in and of itself insure the sort of action which will need to be taken by state and national public bodies to correct specific inequalities and handicaps under which the railroads labor. But it will help to create the atmosphere within which such subjects may be considered on their merits by those who have the responsibility for dealing with them—without the prejudices, misunderstandings and antagonisms which have sometimes colored such consideration.

Few Railroads Adequately Organized.

Toward this goal the railroad industry has made no more than a start. It is not at present adequately organized to do much more. Comparatively few railroad companies have strong and well-staffed public relations departments or offices, charged with the duty and responsibility of seeing that their part of the story is told and their part of the work done. It is not so much a matter of money—though the industry spends little enough in the whole related field of advertising, publicity and public relations—as it is a matter of interest.

Railroad men, unfortunately, tend to be departmentalized in their thinking. In most cases they have little occasion in their work to know, or think, of all the other things it takes to build and maintain and operate a railroad, to get the traffic upon which it depends, to collect and conserve its revenues, and all the rest. They have little occasion to reflect upon what the railroad as a whole does, and what it means. It requires a conscious effort, and some direct attention, to cause men to lift up their eyes and look out over the rim, beyond their jobs to the railroad as a whole, and beyond that to the industry as a whole, and beyond the railroads to their place in the nation's transportation system, and the nation's life.

It is an effort, though, which might well engage the best thought of leaders in the railroad industry, both in management and among the organized employees. Success in such an effort to inform railroad men about the business of which they are a part, and to enthuse them with its possibilities and meaning, could mean a million "missionaries"—a mighty force toward the sound public policies of transportation upon which so largely depends the future of the railroads and of all connected with them.



Robert B. McColl



Duncan W. Fraser



William C. Dickerman

Changes in Alco Top Executives

AS briefly reported in the *Railway Age* of January 5, in a series of administrative changes announced on December 27 by the board of directors of the American Locomotive Company, Duncan W. Fraser, president, was elected chairman of the board to succeed William C. Dickerman, who has resigned. Mr. Dickerman will continue as a director and a member of the executive committee and also will remain in a consultative capacity. Robert B. McColl, executive vice-president, was elected president.

Mr. Dickerman's resignation follows the end of the war, during which period he remained on active duty at the request of the board of directors. He was born in Bethlehem, Pa., in December, 1874. He was graduated from Lehigh University with a degree in mechanical engineering in 1896 and was awarded the honorary degree of doctor of engineering in 1938. He began his career with the Milton Car Works in 1896, serving successively in the auditing, purchasing and engineering departments. In 1899, on formation of the American Car & Foundry Co., of which the Milton Car Works became a part, he was appointed assistant manager of the Milton, Pa., district. He was sales agent and general sales agent of the American Car & Foundry Co. in New York in 1900-05 and vice-president of that company from 1905-29. During the period 1919-29, he was in charge of all operations of the company.

Mr. Dickerman was elected president of the American Locomotive Company in 1929 and chairman of the board on March 1, 1940. He also held the positions of president and director of the

Montreal Locomotive Works, Ltd., at Montreal, Canada. After becoming managing director of this Canadian affiliate of the American company, he was elected vice-president of American Locomotive in 1920 and a director in 1924. He is a director of the General Steel Castings Corporation, the Canada Iron Foundries, Ltd., the Otis Elevator Company, and the Montreal Locomotive Works, Ltd.

Mr. McColl, who has served since September 27, 1945, as executive vice-president, and who as vice-president in charge of manufacturing directed the company's vast war production program, began his career in the locomotive business near his native Kilmarnock, Scotland. After a period with the original builder of the steam locomotive, Robert Stephenson & Sons, in Darlington, England, he joined the Montreal Locomotive Works where he worked during the first world war. He then returned to England with the Armstrong Whitworth Company but soon rejoined American Locomotive as assistant manager of the Schenectady, N. Y., works. He since has been manager of this plant; of the company's Diesel engine manufacturing division; president of the Alco Products, Inc., a subsidiary of the company; and vice-president in charge of manufacturing of American Locomotive.

The new officers of American Locomotive assume similar posts with the Montreal Locomotive Works, Ltd., while W. L. Lentz, recently elected vice-president in charge of manufacturing of American Locomotive, also has been appointed vice-president of the Montreal works.

American Locomotive Sales Corporation; director and a member of the executive committee of the American Car & Foundry Co., the American Car & Foundry Motors Co., the General Steel Castings Company, and the United Gas Improvement Co.; and director of the American-Canadian Properties Corporation, the American Car & Foundry Securities Co., the First Milton National Bank, the Carter Carburetor Corporation, the J. G. Brill Company, the Montreal Locomotive Works, Ltd., and the Shippers' Car Line Corporation.

Mr. Fraser, who was born in Pictou County, Nova Scotia, has been president of the company since 1940. He entered the locomotive business as an apprentice at the Rhode Island Locomotive Works in Providence, R. I., and in 1904 was transferred to the Mon-

Symposium on Passenger Car Design

A.S.M.E. forum on passenger-car design brings car department officers, traffic men, and car builders together in an open discussion of factors influencing car construction

PASSENGER cars for 1946 was the subject discussed before a session of the Railroad Division of the American Society of Mechanical Engineers on November 29, 1945, at the annual meeting of the Society at New York at which the principal speaker was Allen W. Clarke, assistant general mechanical engineer, American Car & Foundry Co. W. S. Sheehan, vice-president, General Steel Castings Corporation and chairman of the Railroad Division's executive committee, presided at the meeting. Following Mr. Clarke's paper, discussions were presented by H. F. McCarthy, executive assistant to the president, New York, New Haven & Hartford; P. W. Kieffer, chief engineer motive power and rolling stock, New York Central; F. L. Murphy, chief engineer, Pullman-Standard Car Manufacturing Company; Col. E. J. W. Ragsdale, chief engineer, Edward G. Budd Manufacturing Company; K. F. Nystrom, chief mechanical officer, Chicago, Milwaukee, St. Paul and Pacific; D. C. Turnbull, Jr., executive assistant, Baltimore & Ohio, and J. C. Travilla, chief mechanical engineer, General Steel Castings Corporation. Mr. Clarke's paper and all of the discussions are presented herewith in abstract form.

Mr. Clarke's Paper

In speaking of the introduction of streamlined trains in 1934 and 1935, Mr. Clarke said, "In the early designs of lightweight streamlined trains, great emphasis was placed on the reduction of wind resistance. To obtain this reduction the width and height of cross section was decreased over conventional cars, greatly restricting the useful space for passengers. Wind-tunnel tests have demonstrated the relative unimportance of cross section dimensions to wind resistance. In 1940 the Association of American Railroads adopted a standard cross section contour, 10 ft. wide over side posts and 13 ft. 6 in. from rail to top of roof. These dimensions will prevail in the 1946 models. The A. A. R. cross section provides for a curved skirt extending to 22 in. from the rail. The skirt adds to the streamline appearance but permits accumulations of dirt, snow and ice and adds to the difficulties of maintenance men working on equipment mounted under the car. Some of the 1946 models will have the A. A. R. skirts

but considerable numbers will appear either without skirts or with the 'hem-line' considerably higher than the 22 in. A. A. R. dimension from the rail.

"As a result of injury to passengers and damage to equipment under some very unusual wreck conditions there have arisen requirements by some railroads considerably exceeding those of the A. A. R. 1939 specification. Such increases in strength requirements will result in weight increases of 5,000 or more pounds per car. The builders can design for any specified assumed or test loads but in so doing must add to the weight and cost regardless of the material used. As a matter of fact, the A. A. R. minimum figures have been exceeded by most of the designs built in the past and this will hold true for the 1946 models. Also, strength calculations are usually based on the framing members only and do not take into account the value of inside finish, partitions, and accessories."

Mr. Clarke analyzed the forces acting on the center sill and included formulae in his paper for determining center-sill moments close enough for practical purposes. He pointed out that center-sill area controls the compressive stress due to end load and is of greater importance in its relation to bending moment stresses. Because deflections control stress distribution in the structure, he stated that the modulus of elasticity and the moment of inertia, a function of area, are physical properties more important than tensile strength.

Four Basic Materials

Referring to materials for the 1946 passenger cars, Mr. Clarke said, "The materials used before the war and which will continue in use are (1) mild carbon steel, copper bearing, (2) low-alloy high-tensile steels; (3) stainless steels, and (4) aluminum alloys. However, new alloys with improved properties are now available, especially in the low-alloy high-tensile steels and aluminum. Designs employing all of these materials may be expected to meet and exceed the minimum requirements of the A. A. R. specification. Other factors which must be considered are weight, cost, and appearance.

"As the total weight of the material in the structural shell is only from 25 to

35 per cent of the total weight of the completed car, the percentage of total weight which can be saved by the use of light high-strength materials and careful design is somewhat limited. For example, the total truck weight will usually equal or slightly exceed the weight of a low-alloy high-tensile steel shell. This indicates the necessity for a thorough study of weights of specialties, finish materials, and accessories as a fertile field for weight reduction.

"Of the four basic materials mentioned, mild carbon steel will produce the heaviest car, other factors being equal. Considering a coach 85 ft. long over the coupler pulling faces, with four-wheel trucks and other features the same, the use of low-alloy high-tensile steel or stainless steel with equal strength values will show a weight saving of 6 to 8 per cent of the total car weight over mild carbon steel and the use of aluminum will show about a 15 per cent saving.

"Lowest costs favor the use of mild carbon steel but with the weight penalty as mentioned above. The cost of low-alloy high-tensile steel construction is less than for stainless steel construction with little if any difference in weight when designs are of equal strength. The cost of aluminum has been reduced steadily as production has increased. A large number of the new cars will use the aluminum alloys for a major portion of the framing members as well as for inside finish and fittings. When minimum weight is of vital importance due to power limitations, or other factors, aluminum alloys will be the preferred structural material.

"In exterior appearance the 1946 models will be of three types, either shiny unpainted, painted, or a combination of shiny and painted.

"Stainless steel in fluted sections is well adapted to the shiny unpainted exterior and may be applied either on framing of low-alloy high-tensile steel or stainless steel. The surface of stainless steel, however, is not well adapted to the application of paint coatings. A similar shiny unpainted fluted appearance will be accomplished on a number of cars of aluminum construction by the use of extruded anodized aluminum mouldings.

"For painted exteriors, low-alloy high-tensile steel and aluminum con-

struction are best adapted. With the spot-welded attachment of side sheets the low-alloy high-tensile steel sides will be perfectly smooth without exposed rivet heads or other projections, which makes cleaning easy and accumulates a minimum of dirt enroute. The painted exterior or the combination of painted surfaces with unpainted fluted surfaces have the advantage of making distinctive color schemes possible for individual railroads. When tied in with an advertising program this color scheme will soon become a symbol of the particular railroad in the public mind.

Car Types

"Of the cars on order for 1946, not including sleepers, coaches considerably outnumber cars of other types. This probably represents a trend on the part of the railroads to exert their best efforts to attract the coach passenger and a recognition of this class of travel as the best field for the profitable movement of large numbers of people. It is in this field that the railroads have their greatest advantage over the other forms of transportation, namely, the comfort which comes from adequate space, giving the passenger freedom to move about and at the same time moving large numbers of people at low cost.

"In the luxury cars such as diners, lounge, and parlor cars, we will see striking examples of the ultimate in decorative features and in new facilities such as private rooms, cocktail lounges, motion pictures, space for dancing and children's play rooms. The coaches will have less radical innovations but will include many refinements. Seats will be more comfortable both for day and night travel; lighting will be improved especially in the better application of fluorescent lighting; vestibules, end doors, and passageways will be wider for easy entrance and exit; improved arrangements for the stowage of luggage will be provided, and washrooms and toilets will be of ample size and equipped with new space-saving arrangements of washstands and vanity dressers. Cleanliness is of the utmost importance to passenger comfort and increased attention is being given to details which contribute to easy cleaning and maintenance.

"Such coach equipment, offering maximum safety and comfort, will certainly attract passenger travel to the railroads in such volume as to permit profitable operation at low cost to the traveler.

Standardization

"It is apparent that there is going to be wide variety in the 1946 passenger train cars. This is true, not only of the various types of cars for distinctly different services, but even for cars of the same type such as coaches. Floor plans

differ for each railroad, some requiring small toilets and maximum seating capacity, others desiring large washrooms and exceptionally wide seat spacing. Framing materials and even designs produced by the several builders of the same basic material vary greatly in detail. This diversity requires large engineering forces, increases costs, and hampers production by the builders. Complete standardization is hardly possible at this stage in the development of the modern lightweight passenger car and standardization, however desirable from a production standpoint, should never be maintained to the point of stifling progress. Much more, though, can be done without approaching this danger zone."

Mr. McCarthy's Views

As an authority on passenger traffic, Mr. McCarthy discussed the engineering factors of new passenger car designs as presented by Mr. Clarke in their relation to passenger appeal and needs. Speaking of exterior appearance, Mr. McCarthy stated, "From our experience with the early streamlined trains, we discovered that the streamlining of the exterior was but a dramatic gesture to drive home to the public the tangible improvements in comfort that were built into the cars. The exterior appearance was an entering wedge to attract and gave us a chance to demonstrate the significant improvements.

"Mr. Clarke has thrown a bombshell when he makes the statement that, 'The cost of low-alloy, high-tensile steel construction is less than for stainless steel construction with little, if any, difference in weight when designs are of equal strength.' If this statement is true, and I'm not sure that it will stand in debate, then stainless steel is not going to persist in railway car construction except for exterior or trim use. The passenger department salesman can sell appearance and can sell a comfortable seat. In today's market, when safety is taken for granted except in its demonstrated absence, the passenger salesman cannot sell a center sill.

Passenger Preference

"Survey after survey of public preference has indicated that the public prefers and will accept more readily as modern a car with liberal exterior use of natural metal finish. You will note the qualifying adjective, 'liberal,' because it is my belief that the combination natural finish and painted exterior is destined to become the standard railway car of the 1950's. The individuality and the opportunities for exciting exterior design which results from the combination have a positive sales advantage. The public and the prospective customers for the railroads now have in mind that any

railroad car with comfortable seats and sufficient interior advantages to merit patronage must have a partially shiny exterior. However, shortly after half of the railroads utilize the natural finish metal, then the public will look for another symbol of change.

Fundamentals Important

"Within Mr. Clarke's sentence which points out that the comfort which comes from adequate space gives the railroads their greatest advantage lies the clue to successful selling of the railways' only passenger product—a seat in a car which operates between cities. Railway passenger service is not now an indispensable product to any individual or to any community, in that there are acceptable and practical substitutes in a peacetime economy. The private automobile, the bus, and the airplane provide adequate and satisfactory alternative passenger transport and, therefore, we compete in a completely free market. We must provide greater safety, comfort, and luxury than the average individual can secure in his own home, and the price of this comfort and speedy transportation must not exceed our present rate levels. For that reason I do not emphasize the types of cars with teeter boards for children and dancing space for 'jitterbugs.' These developments are dramatic, eye-catching material for advertising and publicity to help us solve the fundamental problem of attracting 'seats' to sit on our seats. It's entirely too easy to emphasize the unusual, and fail to solve the fundamental.

Diversity Required

"There have been many recommendations regarding standardization. In Mr. Clarke's paper there is a trace of that dissatisfaction with respect to the lack of progress in attaining uniformity of design. The runs and passenger density characteristics of the railroads that will be in the passenger business in 1955 are so dissimilar that I cannot look forward to complete uniformity of design. In order to attract customers to the New York-Boston runs on the New Haven we must utilize double vestibule cars—our intermediate stops and the need for speeded-up schedules require quick exit and entrance. In contrast, other considerations require and permit use of single vestibule cars between, for instance, New York and St. Louis and Chicago.

"We certainly can go too far in adopting standardization of design so long as our markets are not standardized. The only railroads that stand a chance of engaging in profitable passenger operations during the competitive era ahead are those roads that have a favorable market condition and which precisely

tailor their passenger cars to the exact needs and 'wants' of the available market. I don't believe that I am pessimistic when I make what I think is a realistic comment, that Mr. Clarke's sentence, 'Such coach equipment offering maximum safety and comfort will certainly attract to the railroads passenger travel in such volume as to permit profitable operation at a low cost to the traveler,' applies only to a *few* railroads.

More Truck Research

"What railroads? The railroads that go beyond the major part of Mr. Clarke's paper and pick up some of the topics which he mentions but does not stress. We simply must give the public an easier ride. Truck research and the problems of truck design must be carried much further. There is a widespread impression that shock absorbers are the answer, but there is also a widespread belief that the costs of maintenance both in labor and in out-of-service time are excessive. Profitable passenger operations in future years will result from low maintenance costs, for the advancing costs of labor must be overcome in the design stage. There is no other aspect of the railroads' passenger product which is of greater importance than improvement in the ease of the ride. From the standpoint of the passenger salesman I tell you we must improve our performance.

"Mr. Clarke makes a very important point when he states that only 25 to 35 per cent of the total weight of the completed car results from the material in the structural shell. Weight saving from a standpoint of speedy and efficient use of present and future motive power is so tremendously important that I regret that Mr. Clarke did not include a similarly exhaustive discussion of the remaining 65 to 75 per cent.

"In the face of higher and higher labor cost per hour, we must minimize cleaning and maintenance man-hours. This also must be done by improved design, for the standards of cleanliness on American railways must be vastly improved if we are successfully to compete. I cannot take for granted the pre-war cleanliness standards. The car builder, the operator, and the salesman must unite to improve these standards, especially in the washrooms, if we are successfully to attract and retain patronage.

Seat Spacing

"In seating, I think that we have made notable progress in meeting the public's desires in recent years. In my mind it is regrettable that emphasis

seems to be on the number of inches between seat centers rather than a less specific but more desirable emphasis upon room for the passenger. Our mechanical department people have convinced me that adequate space for New Haven runs can be secured in 39½-in. seat centers, although there seems to be an almost universal insistence upon a 41½-in. minimum regardless of the mechanism or the contour of the seat. In this connection, I am talking about the most modern and accepted type of reclining seat design which has been adopted after careful research. Primarily, this is a job for designers and engineers rather than interior decorators, for what we are selling fundamentally is a comfortable, easy ride.

Air Conditioning

"Whether the data is received from questionnaire, interview or casual conversation, the public expects that the air-conditioning installation in the 1946 model coach will be vastly improved. Even Pegler, in his plea for simplicity, mentions the importance of air conditioning. We have been having too many failures during the past several years, and in the new cars we must obtain 100 per cent dependability. The design should provide an ample flow of cooled air to obtain the desired temperature, even in the face of capacity standees. Profitable passenger operations will bring peaks of travel on weekends and holidays which will go beyond our seven-day-a-week capacity. Aside from the complaints about failures and inadequate cooling capacity, one of the great complaints about air conditioning results from the drafts caused by faulty design of the ducts. Whether or not the electrostatic dirt-removing devices are utilized in connection with air-conditioning installation, the minimum standard must be an adequate, reliable air-conditioning system which will give us a significant advantage over other modes of transportation. This is one field in which we can excel, and we should capitalize upon it.

"One advantage enjoyed by the railroads has never been properly exploited: We can, and in the future we must, provide better lighting. Not only for passenger comfort and satisfaction, but also because the lights, themselves, provide a nighttime advertisement for our product, is it important that we take advantage of every one of the recent advances. Our railroad is experimenting with a cold-cathode fluorescent lighting system which fills the entire car with light, provides excellent light at reading plane, and yet eliminates glare, hot spots, and shadow. The

greatest attention to lighting systems is warranted by our ability to excel competitive modes of transportation.

"Although there have been notable advances in elimination of noise within the body of the car, much remains to be done, and the customer expects much more from the railroads. In design of the shell, truck, and installations of specialties constant attention must be given to elimination of vibration and noise. Here, again, we have a positive advantage over the airplane, and are at a disadvantage with respect to the bus and private automobile. One of the great by-products of air conditioning was the elimination of the noisy ride.

The Hand-Luggage Problem

"So far as I know, only one attempt has been made to solve one of the railroads' most serious problems—handling of hand baggage—at least only one attempt along structural and designing lines. Changed customs, changed luggage design, and the gradual decrease in the practice of checking baggage, has caused a serious problem within the car. This problem has been solved in part by improved luggage racks and storage bins, but the problem remains at final terminal destination. At intermediate points, slow baggage handling has had a harmful effect upon schedules. At terminal destination, with a concentration of passengers, slow unloading is not only uncomfortable, but a positive deterrent to rail travel. Passenger comfort and passenger satisfaction demand more experimentation and some alleviation of the present disabilities. Of course, these difficulties have been at a maximum during the past war years, but with return of competition new techniques in this field are essential. Baggage handling is a problem which will require most ingenious thought."

Mr. Kiefer Speaks

Mr. Kiefer prefaced his discussion with an account of the many complicated mechanisms that are now a basic part of the modern passenger car and additional auxiliaries and conveniences that are being added or proposed for new cars. "To keep these cars moving on advertised schedules," he said, "now necessitates and will continue to require much more specialized maintenance attention with correspondingly higher costs in the future. We cannot have passenger cars with all this equipment without paying for them initially and currently and this fact must be faced and understood."

Referring specifically to Mr. Clarke's paper, Mr. Kiefer stated, "There is

much discussion about the exterior appearance of passenger trains and from our experience it is possible to develop good arguments in any direction, but I believe that moderate streamlining of motive power, cars, and trains, with appropriate external color and related treatment has a distinct public appeal and should be taken advantage of by the railroads within reasonable and practical limits. At the higher speeds, streamlined construction is not without advantage in terms of reduced resistance.

Car Exteriors

"A number of important factors enter into the decision as to whether stainless steel, aluminum, unpainted or painted surfaces, or combinations of both should be used, especially where complete trains are involved. The use of finish coatings on the private automobile, including preference for the darker and more conservative colors, may be influenced by the fact that the owner either must pay for or perform the cleaning operations. Originally it was claimed, among other things, by the advocates of stainless-steel exteriors for passenger cars, and this was not confined to the different builders, that not only was the cost of painting saved but that little, if any, cleaning would be necessary. Subsequent experience has shown the need for the same cleaning attention of stainless-steel exteriors as for painted surfaces and sometimes under certain conditions of operation the maintenance costs for this work on the former are higher than with the latter.

Weight of Specialties

"I am glad Mr. Clarke has pointed out the relatively small percentage of 'total car' represented by the body shell, which amounts to about 25 to 35 per cent of the complete unit. Modern trucks are much different from those of a few years ago in that they support brake apparatus previously attached to the car body itself, and contain other additional features such as roller bearings, snubbers, bolster thrust links, and wheel-slip controls.

"Beyond the ranks of the equipment designers this over-all car weight situation is not generally realized or understood and I agree fully with the author on 'the necessity for a thorough study of weights of specialties, finished materials, and accessories' by the suppliers of these important items. This is an urgent need but its fulfillment is not easy to attain because not infrequently the specialty manufacturer is inclined to think about his own equipment alone

and to conclude that a given number of pounds weight reduction therein is not important. What he should do is to consider this problem in terms of weight percentages against the total car and then get to work to make his contribution accordingly.

"Whether the initial cost of cars having low-alloy high-tensile steel body construction is less than that of stainless steel, is determined currently from actual bids on complete cars. As stated by the author, and with other things being equal, it is believed little, if any difference in weight of the complete unit may be expected to result from the respective uses of these two materials. In my opinion, much more experience must be accumulated and each situation must be studied separately before the overall economics with respect to the choice of materials can be judged intelligently, but proper weight reduction is an important item."

In commenting on luggage handling, Mr. Kiefer mentioned the luggage elevator arrangement installed by one railroad with its disadvantages being additional cost, maintenance, space required, and congestion caused by passenger crowding around the outlet. He said that luggage handling at destinations of long runs usually does not take over two minutes but that the habit of passengers to line up at the end of the car for ten minutes or more makes the luggage-handling time seem much longer.

Mr. Kiefer referred to the progress made in humidity control and to the need for greater uniformity of heating, ventilating, and cooling. While it is necessary to design car interiors for efficient cleaning he believed satisfactory conditions on long runs could only be maintained by adequate attention enroute and at terminals.

Better Car Connections

Referring to riding qualities and comfort, Mr. Kiefer said, "The advent, several years ago, of effective double-acting cushioning devices and tight-lock couplers which replaces the usual varying amounts of free slack with controlled resiliency, has made it unnecessary to contend with rough action and dynamiting between the cars of non-articulated trains while starting, running, or stopping. In addition to the sealed and better insulated bodies of air-conditioned cars, two of the most important contributions to noise reduction have consisted of the car connection and the introduction of buffer-plate mechanism designed for maintenance with relative freedom from slack, together with diaphragms at the ends of the cars, spring supported from the top.

"The next most important problem is to reduce the effects of lateral car body action. If this could be brought up to the same relative standards as now are available for the elimination of noise and longitudinal shocks between cars, and the vertical ride obtained with latest trucks having the bolsters supported by snubbed helical springs, little, if any instrumentation would be necessary for practical confirmation of the results."

Speaking of standardization he believed it should be confined to car body design. "A standard of any kind," he said, "is good and should be continued in use only so long as it is the best thing for the intended purpose, and in view of all of the foreseen competitive difficulties, including subsidized forms of competing transportation, it is not believed that now is the time to enforce rigid standardization. There is also some question as to whether reductions in prices from the builders would result from this alone, even though it were accomplished. From the standpoint of the builder, quantity orders for cars appears to mean more in competitive bidding than any other one factor. One way to control costs is to avoid changes of consequence after orders have been placed. Such alterations always result in substantial extras from the builders, for which justification usually can be shown."

Murphy and Travilla on Weight

Mr. Murphy presented breakdown of the weight savings, comparing the weight of an old heavy weight coach with a new lightweight coach:

| | Per Cent |
|--|----------|
| Frame | 16.3 |
| Finish and floor | 4.1 |
| Insulation | .8 |
| Air conditioning, heating and electrical equipment | .4 |
| Body specialties and misc. | 3.3 |
| Truck | 6.9 |
| Total savings in car weight | 31.0 |

Mr. Murphy included in his discussion an extensive treatment of truck design. He observed that experience with the modern four-wheel truck has demonstrated a safety comparable to any truck in service. "Furthermore," he said, "there is a relationship between the truck and body weight which affects riding qualities. A heavy truck under a light body is not conducive to the best ride. The weight of the conventional six-wheel truck with 5-in. by 9-in. journals is 48,000 lb. per car, while the weight of a modern four-wheel truck, for the average lightweight coach, with 5½-in. by 10-in. journals is 36,000 lb. per car and the difference in cost is approximately \$3,000 per car in favor of the four-wheel type.

"It is my belief that the railroads should take a keener interest in truck development," he said.

On standardization, Mr. Murphy stated, "We agree that the passenger-car industry can go much further in standardization without even approaching the point where progress may be stifled. The railroads can now help themselves and the industry if they would allow a little more leeway by permitting the use of some of the car-builders' standard features of construction rather than the railroad specifying every detail as to just how a battery box, the door, or the floor is to be made. Standardization of this type will save both time and money and will still permit tailoring of the car to suit the requirements that are determined by the traffic conditions in which the cars are to operate."

Truck Weights

Mr. Travilla's remarks dealt with the car trucks, particularly with respect to weights. He presented the following breakdown of truck weight to indicate the difficulty of getting weight out of the trucks:

| Truck Parts | Per Cent |
|------------------------------|----------|
| Wheels, axles and boxes | 35 |
| Truck frame and center plate | 25 |
| Brake cylinders and shoes | 15 |
| Equalizers and spring seats | 10 |
| Springs | 5 |
| Miscellaneous | 10 |
| | 100 |

Of these items, it is possible, he said, to save 10 per cent of the truckframe weight by the use of alloy-steel castings—a reduction of 2.5 per cent of the total truck weight.

Ragsdale on Stainless Steel

Colonel Ragsdale confined his discussion of Mr. Clarke's paper to points on which he disagreed. He felt that the railroads should offer relaxed travel and not "added excitement" such as baby rooms, movie shows, and dance floors. He believed the Astra-Dome car will find limited application, "limited in some cases by lack of overhead clearances." He noted that a small percentage of items cause a disproportionately large percentage of maintenance and personally wished someone would start an Anti-Outer Diaphragm Society.

In respect to strength Colonel Ragsdale stated: "The Budd attitude has been that the A.A.R. practices were distinctly minimum. It was not intended that we build down to them because they were supposed to be all-sufficient. Instead, the Budd Company has followed the thought that we should build even beyond the strength of the strongest car which might ever get into a train. With this in mind, we tested a

well-known coach of conventional heavy design. We used that rather than the A.A.R. practices as our yardstick. Naturally, we exceed all of those practices. A recent test of a car representing our postwar construction gave results that are not just margins above the A.A.R. requirement; they are multiples of them."

Discussing materials, Colonel Ragsdale said: "Mr. Clarke comments upon the increased cost of stainless steel with, as he says, '...little if any difference in weight when designs are of equal strength.' That is the point. When the weights are comparable, the strength values are not comparable. He admits a weight improvement over carbon steel by the use of low alloys which are 30 per cent stronger than carbon steel, but denies any further improvement by the use of stainless, which is 100 per cent stronger than the low alloys.

"I realize that one doesn't design from laboratory values alone. If we did, we'd still have wooden cars. It is a strange commentary that—by all formulas—one can build just as light and just as strong no matter whether one uses stainless steel, aluminum alloy, wood or presumably plastics. The respective values of tensile strength, modulus of elasticity and weight balance out almost exactly. Actually, we use all four in our car building and to them add low-alloy steel, arc welded but stress relieved. There seems to be a use for everything, in its place, and price alone should not determine where it should go."

Nystrom Wants Less Weight

Mr. Nystrom expressed the opinion that a passenger car can be built which will not weigh much over 100,000 lb. "I know we can build a satisfactory passenger truck which will weigh 30,000 lb. per car set," he said. "In connection with weight, I believe that the car builders have struggled and done a good job, but the specialty companies have not followed and probably do not appreciate the value of weight reduction.

"In building passenger cars we should figure in ounces to save weight and I have a rough measuring stick to pay a maximum of a dollar for each pound of weight saved in passenger cars and locomotive design and a maximum of ten cents per pound of weight saved in a freight car.

"I very much liked Mr. McCarthy's appraisal of passenger cars. I believe particularly the pretty exterior is much the same as a woman's hat—the style changes. In the matter of skirts or shields, my opinion has been that they

are entirely unnecessary, and at least one railroad has had the courage to abbreviate them to a very considerable extent. Col. Ragsdale advocated an anti-diaphragm league. I would like to announce he has one member in it already. In the 1946 cars, the Milwaukee Railroad is going to eliminate the outer diaphragms.

"I have been very pleased to hear the emphasis placed on good riding. I think Mr. Murphy suggested the railroads should be more liberal in experimenting. In the last 10 years, the Milwaukee Railroad has built about 14 or 15 experimental passenger trucks and is going to build another."

Turnbull Sticks to Traffic

As a traffic man, Mr. Turnbull considered the merchandising and not the engineering aspects of the subject. Referring to passenger business, he said, "All railroads have at least three general classifications under which to operate in the passenger business, namely, commuter service up to trips of about 50 miles maximum; runs of 300 or 400 miles and over which might be termed long daylight trips and overnight travel, and the in-between service.

"The design of the commuter-service equipment has not been mentioned today. Some railroads have little of this service and wish they had less while others are very much interested in it. I merely ask this question today: shouldn't we continue to stick to simplicity of design, the rapid loading and unloading principles, durable but plain upholstery that can be quickly cleaned, linoleum or tile floors with floor corners eliminated, comfortable non-reclining seats, emergency toilet facilities, good lighting for newspaper and magazine reading, no air conditioning, but large fans and no food service?

"We must insist upon using equipment designed or remodeled to do this job right. I am a commuter of nearly 10 years standing, not on my own railroad, and I have yet to hear a compliment paid to the rail service. The equipment is usually discarded equipment designed for another purpose, is poorly maintained, is not kept clean, and therefore gives the railroads, in general, a bad name. With urban parking conditions as congested and involved as they are I believe we can do a better job postwar in this field than we have done prewar. Let's at least pay attention to cleanliness, courtesy, dependability, and rapidity of transit in this specialized end of the passenger business. Maybe it is a "dead duck," but at present it's poor advertising.

"So much attention has been given by the previous speakers to the equipment

which will serve rail passengers on the longest trips that I will comment briefly on only a few points. In the designs that we are thinking about, coaches containing 44 to 46 reclining seats, 52 in. apart and operated on a reserved-seat basis, we should endeavor to find adequate space for luggage in addition to the coach racks. Further, let's adopt the motto of the filling stations and put some cleanliness and freshness in the lavatory.

"In my opinion the 'bump,' 'the bulge,' the 'vista dome,' the 'astra dome' or observation deck, are here to stay. It is a direct answer to bus advertising of 'See the country from the open road.'

"Large, non-fogging, windows with easily operated venetian blinds, full and night lighting, dependable air conditioning, the ingenious and non-offensive use of radio plus a public-address system and the possible skillful application of movies will be included on tomorrow's trains.

"The B.& O. still believes that the closest way to a patron's heart is through his stomach. With the rail know-how and facilities in the diner, club car, and snack bar, we should be able to back the bus and airplane 'off the map' in this department. There should be no comparison in any travelers mind; the railroads can and must be far out in front. Some contend we should follow the example of the steamship and serve a snack mid-morning or mid-afternoon to those who desire it, to offset the meal service of the airplane.

"From the sleeping-car viewpoint the roomette and bedroom will probably maintain their popularity in the next decade and will continue to be improved. So many times in these busy days a roomette is used by two persons. My suggestion is to offset the aisle of the roomette car and add a few inches on one side for the double and take off a few on the other side for the single. Beyond this we've got to find a convenient way for the roomette traveler to go to the lavatory without going through the present elaborate procedure.

A Challenging Opportunity

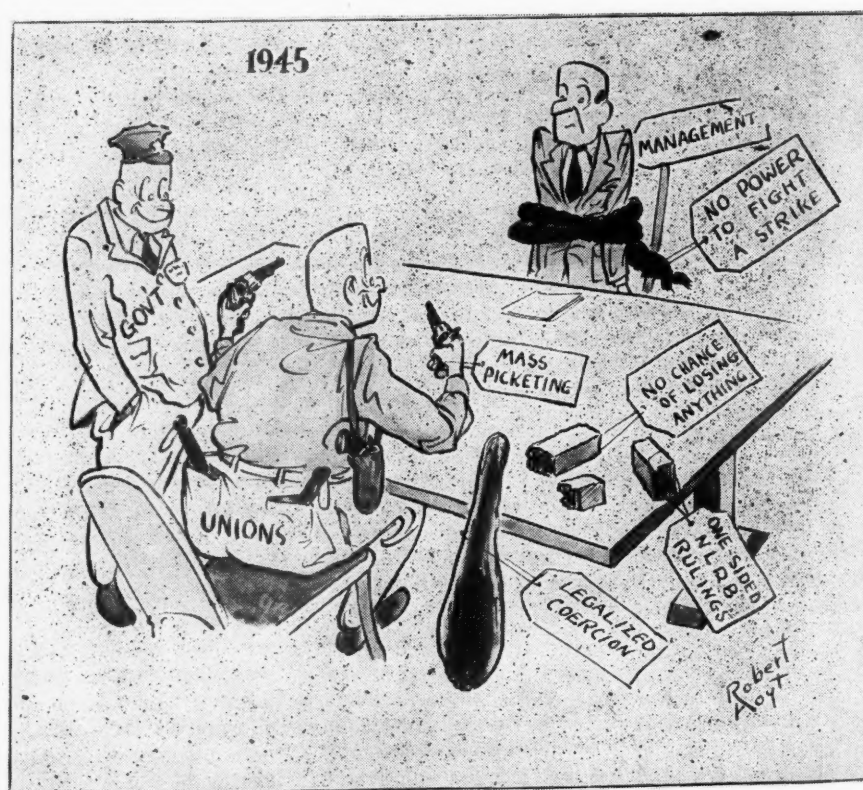
"On the long trip the train service and facilities must be the best we can give for the price of the ticket, without being elaborate, gaudy or impractical. The equipment needed for service between the 50-mile commuter-run and the very long trip is in a different class and must be so regarded, usually being confined, however, to the limits of design as described in the other two classes.

"Five years ago, in 1940, we averaged 13 passengers to a car and our passenger miles were less than one-

third of present values. We were building then, creating traffic, gaining from the 1938 bottom; not very fast, but still going forward. Now that we're slowly losing the wartime traffic, let's be smart enough to level off at a different point this time, let's take the

high road and keep on our toes, take same big business from the private automobile and show 'Mr. Airplane' that we can successfully merchandise our product to his envious admiration and at rates which will make him hustle."

And They Call It "Bargaining"



COMMUNICATION and BOOK...

Favors Platforms at Train-Floor Level

TO THE EDITOR:

TOLEDO, OHIO

Perhaps in some of your future pages you could draw attention to the difficulty we all have in getting on or off passenger trains, especially day coaches. The time has come, it seems to me, to do something about loading and unloading at car-floor levels. Millions of patrons would thank the roads if it were made possible for them to enter and leave with ease. The railroads are on a vast car-building program, which means that most of the old open vestibule cars without the step covers will be retired.

Need anyone call attention to the difficulty of boarding a train with two bags, a box of lunch, and a four-year-old child? Or of getting off a train? Or of that last high step? When traveling Pullman, porter help is extended, but not so in the coach.

So much for the physical discomfort of getting on or off a train. Next is time. Has anyone ever figured out how much time would be saved by train-floor loading and unloading? Time is money and the time saved would pay for the cost of raising platforms in certainly not over five or six years. Express and mail could be handled to much better advantage because platform trucks could be run right into the express and mail cars. Fewer packages would fall off low trucks and if any did, the drop would not be so far.

Toledo is to have a new union station. Will we have old fashioned rail-level platforms or car-level platforms? Do not you, too, have a feeling of ease and comfort when you board a train at Grand Central, New York? Why must we do a monkey act when we board trains everywhere else?

H. G. HUHNS,
General Traffic Manager.
Libby-Owens-Ford Glass Co.

Universal Directory of Railway Officials and Railway Year Book, 1945-1946, compiled from official sources under the direction of the editor of "The Railway Gazette." 586 pages. 8½ by 5½ in. Bound in cloth. Published by the Directory Publishing Company Limited, 33 Tothill Street, Westminster S.W.1, London, England. Price 20 shillings.

With the present edition, this publication begins its second half-century of continuous publication. Due to a fire in November, 1944, all of the standing type was destroyed. The improvement in the world situation, however, enabled the publisher to use the inevitable period of delay to revise the volume far more thoroughly than otherwise would have been the case.

The first section of the book covers individual railways throughout the world, together with the names, titles and addresses of principal officers. Particulars of mileage, equipment and financial results are included. The second part of the book is devoted to statistical and other information, and includes tables on the development of

the world's railway mileage, the principal gages in use, fast train runs and the world's longest railway tunnels, as well as detailed statistics on British railways. A chronology of railway history, a railway bibliography and three indexes—country, general and personal—conclude the book.

Color Dynamics

(Continued from page 141)

usual plan, all electrical conduit, switch boxes and motors were painted a focal red, to make them stand out in bold relief.

Two objectives were always kept in mind while selecting the color combinations—first, that there should be an easily-detected color difference between the stationary and moving parts of machines, and between these and the material being worked or handled; and, second, that the colors used could be relied on to reflect the necessary brightness. On this basis, designating tints as separate colors, seven colors were used in the physical laboratory, as follows:

- (1) Focal ivory
- (2) Vista green—a dark shade
- (3) Focal yellow—the spectrum color
- (4) Focal beige
- (5) Focal red—a dark shade
- (6) Sea-foam green—a relatively light shade
- (7) Suntone—a light shade of yellow

Both focal and receding colors were applied to the walls, the sidewalls being painted with sea-foam green and the end walls with suntone; a dado of vista green being used with both colors. Cabinets and cupboards are finished in beige or vista green, but in both cases the doors are beige. Work benches have vista green bodies and focal yellow tops. In general, the stationary parts of machines are vista green and moving parts are focal yellow. As already mentioned, however, this was varied somewhat to meet special conditions, such as flywheels, which are painted focal red, and operating handles, which are focal yellow or focal beige. Another variation is the color scheme for a shaper, in which the ram is beige and the head and table a focal yellow. One of the illustrations shows in detail the color arrangement for each of the machines and other equipment in this laboratory.

Laboratories Differ

There is considerable difference in the arrangement of the two laboratories. In the Physical laboratory, which is approximately 40 ft. by 75 ft. in area, the floor space is clear, except for an office enclosure, 12 ft. by 18 ft., in one corner. On the other hand, the open-floor area of the chemical laboratory, which is 42 ft. by 46 ft., is bounded on two adjacent

sides by a series of offices, work rooms and special test rooms, which are partitioned off from the main part of the room.

In planning the color scheme for the chemical laboratory, it became apparent at once that it would need to be different from that of the physical laboratory, partly because there are only two or three small machines in this laboratory, and partly because the furniture in the main floor area consists primarily of cabinets, work benches and tables. Furthermore, because of the diversity of the work performed, no set rules that could be applied universally were possible. Rather, it became necessary to consider each local situation on its merits and to work out the problem on this basis. Yet this was done in a satisfactory manner, without violating the general color scheme or creating disharmony.

Five of the colors used in the physical laboratory were employed in the chemical laboratory, the focal yellow being omitted and focal green being substituted for the focal ivory, since there were no moving parts to be emphasized. One outer wall and the opposite inner wall were painted sea-foam green, while the other two were finished in suntone, dados of vista green being used with both colors. All cabinets on the main floor were coated with focal beige, both bodies and doors. This color was also used on the three machines on this floor, consisting of a metal-cutting band saw, a belt polisher and a cut-off grinder. All tables were likewise finished in focal beige, but the work benches have beige below tops of vista green.

No color treatment was applied in the offices, except to the walls, which are sea-foam green with a dado of vista green. The toilets have walls of focal green with the same vista green dado. The photographic dark room is finished entirely in vista green, while the storage room is done with aluminum. Other workrooms are finished in suntone or sea-foam green, but all have the vista-green dados, the only exception being the wood-testing room, in which the dado is focal beige.

To one who has never seen an installation of color-dynamic painting, and who is familiar only with the usual grays and whites of the typical shop, unprepared entrance into either of these laboratories produces something of a shock. The first impression of bizarre use of colors passes quickly, however, leaving a pleasing effect, largely because of the harmonious contrasts of the colors. As familiarity develops, particularly if this comes through participation in the work of the laboratory, it is discovered that the colors are restful, producing no eye strain or irritation of the nerves, and that the personnel is carrying out its work to better advantage than under the former system of painting.

GENERAL NEWS

1st Quarter Loadings Seen Down 4 Per Cent

Shippers' Boards predict drop below the corresponding period of 1945

Freight car loadings in the first quarter of 1946 are expected to be four per cent below those in the same period in 1945, according to estimates compiled by the 13 Shippers' Advisory Boards and made public on January 12.

On the basis of those estimates, freight car loadings of the 30 principal commodities will be 6,417,622 cars in the current quarter, compared with 6,687,839 actual car loadings for the same commodities in the first quarter of last year. Five of the 13 boards estimate an increase in loadings for the first quarter of 1946 compared with the same period in 1945 and eight estimate decreases.

The tabulation below shows actual loadings for each district in the first quarter of 1945, the estimated loadings for the first quarter of 1946, and the percentage of increase or decrease.

The 13 boards expect an increase in first-quarter loadings of 17 of the commodities listed, and a decrease in 13.

| Shippers' Advisory Boards | Actual Loadings First Quarter 1945 | Estimated Loadings First Quarter 1946 | Per Cent Increase |
|---------------------------|------------------------------------|---------------------------------------|-------------------|
| New England | 111,987 | 131,266 | 17.2 |
| Atlantic States | 601,701 | 602,867 | 0.2 |
| Allegheny | 1,031,658 | 991,979 | 3.8d |
| Ohio Valley | 930,489 | 882,582 | 5.2d |
| Southeast | 844,513 | 851,229 | 0.8 |
| Great Lakes | 303,819 | 293,288 | 3.5d |
| Central Western | 300,158 | 271,865 | 9.4d |
| Mid-West | 888,850 | 858,395 | 3.4d |
| Northwest | 247,177 | 279,015 | 12.9 |
| Trans-Missouri-Kansas | 347,893 | 348,160 | 0.1 |
| Southwest | 543,742 | 397,096 | 27.0d |
| Pacific Coast | 300,619 | 286,169 | 4.8d |
| Pacific Northwest | 235,243 | 223,711 | 4.9d |
| Total | 6,687,839 | 6,417,622 | 4.0d |

Among the increases expected are the following: Cement, 19.6 per cent; automobiles and trucks, 12.9 per cent (incomplete account of strikes); grain, 11.6 per cent; agricultural implements and vehicles other than automobiles, 7.7 per cent; all canned goods, 6.3 per cent; citrus fruits, 5.8 per cent; brick and clay products, 4.7 per cent; salt, 4.5 per cent; poultry and dairy products, 2.6 per cent; cotton, 2.5 per cent; and flour, meal and other meal products, 2.4 per cent.

Commodities for which decreases are estimated and the amount of the decreases include the following: Petroleum and petroleum products, 26.4 per cent; chemicals and explosives, 20.3 per cent; cotton seed and products, except oil, 18.7 per cent; machinery and boilers, 16.9 per cent; ore, 12.2 per cent; fresh fruits other than citrus fruits, 12 per cent; metals other than iron and steel, 12 per cent; sugar, syrup and molasses, 11.7 per cent; iron and steel, 9.7 per cent; hay, straw and alfalfa, 8.2 per cent; and coal and coke, 2.5 per cent.

Chicago Station Committee Appoints Two Officers

The South Side Railroad Terminal committee, which is headed by Fred G. Gurley, president of the Atchison, Topeka & Santa Fe, and was formed for the purpose of selecting a site for a new South Side railway terminal in Chicago, has appointed Charles P. Richardson as full-time terminal engineer and Russell Joseph as executive secretary of the organization.

Mr. Richardson is engineer of capital expenditures of the Chicago, Rock Island & Pacific and had been prominently identified with a number of important engineering projects in the Chicago district, including the Chicago river straightening, the Calumet Sag channel and others. His duties with the committee will include organization of an engineering staff to study and report on the terminal problem.

Mr. Joseph is a member of the staff of Mr. Gurley's Santa Fe offices and has been in railroad service since 1934. He will work in conjunction with Joseph d'Esposito, special adviser appointed by Mayor Edward J. Kelly to represent the city of Chicago in connection with the proposed project.

Truckers Tell Lea Just What Ails Them

Say will of Congress has been flouted by "railroad-minded" I. C. C.

Responding to the "questionnaire" distributed by the House committee on interstate and foreign commerce in search of expressions of interested parties concerning the issues to be considered in its proposed investigation of the national transportation situation, the American Trucking Association has submitted a 90-page statement which reiterates and amplifies previous assertions that the "railroad-minded" Interstate Commerce Commission has failed to measure up to its responsibilities, as set forth in the National Transportation Policy and the Transportation Act of 1940, and thereby has perpetuated the allegedly dominant position of the railroads in the transportation picture.

Disobeys Congress—No investigation or new legislation is required to develop a transportation policy, the truckers' organization asserted. The policy already has been enunciated, but the commission has failed to give effect to the expressed will of Congress, it said, and this may be due to one of three reasons: Unintentional misinterpretation of the will of Congress; deliberate intent to assert its own policy without regard to that laid down by Congress; or conviction, attained through the years, that the railroads are entitled to dominate domestic transportation, no matter what the effect may be on "new and independent" forms of transportation.

Even though the national policy is clearly set forth in the law, the A. T. A. went on to say, the truckers have no reason to believe that the commission will apply the standards there prescribed "in an equitable manner" to all forms of transportation subject to its authority. The range of the commission's "administrative discretion" will have to be reduced, the truckers' statement added, or that industry will "probably come to share the attitude of the air industry" opposing concentration of regulatory functions concerning transportation in a single body.

Oppose "Integration"—One way in which the commission has "failed" in its interpretation of the National Transportation Policy, according to the truckers' organization, is its approval of acquisitions of motor carrier operations by railroads. Such acquisitions, the statement suggested, are part of the railroads' "strategy," namely, "to wipe out the historic policy of Congress to foster regulated inter-

(Continued on page 158)

N. Y. Railroad Club to Hear J. H. Kelly

When the New York Railroad Club meets at 8 p. m., January 17, at the Engineering Societies building, 33 West 39th street, New York City, J. H. Kelly, engineer, maintenance of way, New York Central System, Buffalo and East, will discuss "Maintenance of Way, Practices and Development". This is described as a "treatise on the advancement in maintenance of way practices on the New York Central during the past 25 years."

11 Months Net Income Was \$508,000,000

Net railway operating income
for the same period was
\$881,972,625

Class I railroads in the first 11 months of 1945 had an estimated net income, after interest and rentals, of \$508,000,000, as compared with \$624,833,838 in the corresponding period of 1944, according to the Bureau of Railway Economics of the Association of American Railroads. The 11-months net railway operating income, before interest and rentals, was \$881,972,625, compared with \$1,032,972,531 in the corresponding period of the previous year.

November's estimated net income was \$34,200,000, compared with \$63,506,098; while the net railway operating income for that month was \$61,321,067, compared with \$91,218,307. In the 12 months ended with November, the rate of return averaged 3.42 per cent, compared with 3.99 per cent for the 12 months ended November 30, 1944.

[The Interstate Commerce Commission's advance summary of revenues, expenses, and net railway operating income for November includes a footnote saying: "A number of the carriers included in their November accounts charges to operating expenses and credits to tax accruals as a result of the shortened period of amortization of de-

Twenty Class I roads failed to earn interest and rentals in the 11 months, of which nine were in the Eastern district, one in the Southern region, and 10 in the Western district.

Class I roads in the Eastern district in the 11 months had an estimated net income of \$203,000,000 compared with \$261,693,607 in the same period of 1944. For November, their estimated net income was \$18,800,000 compared with \$22,153,312 in November, 1944. These same roads in the 11 months had a net railway operating income of \$366,109,202 compared with \$434,527,340 in the same period of 1944. Their November net railway operating income was \$32,163,077 compared with \$36,287,443 in November, 1944.

Gross in the Eastern district in the 11 months totaled \$3,493,043,442, a decrease of 7.3 per cent compared with the same period of 1944, while operating expenses totaled \$2,717,800,331 or an increase of three per cent.

Class I roads in the Southern region in the 11 months had an estimated net income of \$71,000,000 compared with \$93,627,843 in the same period of 1944. For November, they had an estimated net income of \$3,400,000 compared with \$8,091,248 in November, 1944. The 11-months net railway operating income in the Southern region was \$127,858,516 compared with \$151,625,014 in the same period of 1944. The November net railway operating income was \$8,918,985 compared with \$12,638,515 in November, 1944.

CLASS I RAILROADS—UNITED STATES

Month of November

| | 1945 | 1944 |
|--|---------------|---------------|
| Total operating revenues | \$661,181,176 | \$780,230,524 |
| Total operating expenses | 548,549,650 | 524,235,089 |
| Operating ratio—per cent | 82.97 | 67.19 |
| Taxes | 39,395,330 | 147,369,336 |
| Net railway operating income (Earnings before charges) | 61,321,067 | 91,218,307 |
| Net income, after charges (estimated) | 34,200,000 | 63,506,098 |

Eleven Months Ended November 30, 1945

| | 1945 | 1944 |
|--|-----------------|-----------------|
| Total operating revenues | \$8,288,567,577 | \$8,679,055,597 |
| Total operating expenses | 6,088,421,672 | 5,725,782,182 |
| Operating ratio—per cent | 73.46 | 65.97 |
| Taxes | 1,156,178,710 | 1,734,648,425 |
| Net railway operating income (Earnings before charges) | 881,972,625 | 1,032,972,531 |
| Net income, after charges (estimated) | 508,000,000 | 624,833,838 |

fense projects. This adversely affects their operating ratios." While A. A. R. press releases have made no reference to the matter, statements from the commission's Bureau of Transport Economics and Statistics have said that this amortization speed-up is producing figures on operating results for 1945's last four months which will not be directly comparable with those of corresponding periods in prior years.]

Operating revenues for November totaled \$661,181,176, compared with \$780,230,524 in November, 1944, while operating expenses totaled \$548,549,650, compared with \$524,235,089. Gross in the 11 months totaled \$8,288,567,577, compared with \$8,679,055,597 in the corresponding 1944 period, a decrease of 4.5 per cent. Operating expenses amounted to \$6,088,421,672, compared with \$5,725,782,182, an increase of 6.3 per cent.

Class I roads in the 11 months accrued \$1,156,178,710 in taxes compared with \$1,734,648,425 in the same period in 1944.

Gross in the Southern region in the 11 months totaled \$1,142,670,418, a decrease of 6.6 per cent compared with the same period of 1944, while operating expenses totaled \$789,298,718, an increase of 3.1 per cent.

Class I roads in the Western district in the 11 months had an estimated net income of \$234,000,000 compared with \$269,512,388 in the same period of 1944. For November, they had an estimated net income of \$12,000,000 compared with \$33,261,538 in November, 1944. Those same roads in the 11 months had a net railway operating income of \$388,004,907 compared with \$446,820,177 in the same period of 1944. Their November net railway operating income amounted to \$20,239,005 compared with \$42,292,349 in November, 1944.

Gross in the Western district in the 11 months totaled \$3,652,853,717, a decrease of 0.9 per cent compared with the same period of 1944, while operating expenses totaled \$2,581,322,623, an increase of 11.2 per cent over the comparable 1944 period.

Court Acts in Final Pullman Sale Decree

Three-judge bench sanctions
sale "without prejudice
to Pullman employees"

Philadelphia Circuit Court Justices Biggs, Maris and Goodrich, on January 4 issued a final decree approving sale of the \$75 million Pullman sleeping car services to the upwards of 50 buying railroads responsible for more than 90 per cent of the sleeping car business of the country. On December 18 the court had filed a unanimous opinion approving such sale to the railroads, and on December 26 it issued an interim order authorizing the Pullman Company to continue its services until March 31, 1946, thus permitting the railroad group to complete all financial aspects of the transaction and Pullman to sell such of its light-weight equipment as any of the railroads, exercising their options, might wish to purchase.

The final decree, following months of hearings, during which three other bidding interests presented their claims, set forth certain conditions of approval, namely:

"(1) That no person shall be at the same time a director of Pullman, Inc., and of any vendee railroad, or of Pullman Standard and of any such railroad, or of Pullman, Inc., and of Pullman Company, or of Pullman Company and of Pullman Standard;

"(2) That in the event that the Pullman Company desires to acquire new sleeping cars the purchase shall be made only after competitive bidding in the same manner as provided by the regulations ordered by the Interstate Commerce Commission on October 6, 1919, to be effective for competitive bidding, as those regulations have been or may be hereafter be amended from time to time by the Interstate Commerce Commission;

"(3) That in the event that any vendee railroad desires to acquire new sleeping cars the purchase shall be made only after like competitive bidding;

"(4) That the term 'vendee railroad' ... means a railroad which has purchased and at the time owns or controls any of the stock of the Pullman Company or at the time owns or controls the stock of any corporation to which any of the stock of the Pullman Company or the assets or business of said Pullman Company or any substantial portion of the said assets or business, may be sold or transferred."

Declaring the terms of the court entered March 22, 1945, to have been "complied with by Pullman, Inc.," Senior Circuit Judge John Biggs, Jr., and Circuit Judges Albert B. Maris and Herbert F. Goodrich, decreed that the declarations of this order "shall have the same effect as if injunction had been issued to enforce them."

The bench, having heard earlier in the day from counsel for labor organizations, asking that the sale contain certain provisions for continuing existing contracts, inserted the clause which stated "this order is made without prejudice to the rights of

(Continued on page 159)

Wartime Rail Service Credited to Teamwork

Carriers "blessed" with "magnificent cooperation," says
Car Service Division

Acknowledging the "magnificent cooperation that has blessed the railroad industry during all the days of World War II and particularly during the last twelve months," the annual report of the Car Service Division, Association of American Railroads, proceeds to assert that this cooperation enabled the carriers "to defeat during the winter of '44-'45 the best efforts of the elements to stop them, to continue to meet the tremendous demands of military traffic as it flowed to support the knock-out blows on both sides of the world, to move a record grain and food crop and finally to begin and continue the greatest mass movements of troops in history." The report covers the 1945 activities of the division of which Warren C. Kendall is chairman.

The foreword stated that the division's role as the agency charged with supervision of the countrywide distribution of cars and with the duty of acting as liaison between the industry and the government in many matters under its jurisdiction was "acutely aware" of what cooperation has done. "Energy, courage and judgment in combination," the report said, "have been described as the stuff of which high achievement is made. Certainly it is these qualities in lavish amounts and fine combinations that have finally brought this nation and her allies to these glorious days of victory and peace. To these qualities must be added, however, a proper acknowledgment of the almost atomic power of sustained teamwork."

Employees Praised—Then came the general acknowledgment noted above, after which the report went on to specific citations as follows: "To every railroad employee; to the individual railroad companies; to every shipper and receiver of freight; to the regulating and procuring agencies of the government—the Office of Defense Transportation; the Interstate Commerce Commission; the Army; the Navy; the War Food Administration; the Reconstruction Finance Corporation; the Treasury and others—to all these, the Car Service Division extends sincere thanks for the splendid cooperation that has been such a large factor in achieving the successful transportation of the goods and men of war."

Looking to the future, the report added an expression of hope that "more than a little of this war-born teamwork may be carried forward to the days ahead"; for it is "apparent that new standards of excellence have been set." In the latter connection the report later on discussed the heavier loading of freight cars and freight car efficiency. With respect to heavier loading it notes that the record of five consecutive years of increase in tons per car of carload freight was interrupted in 1944 when the average, 40.3 tons, was 0.7

ton under the 1943 peak. It was calculated that this drop indicated that 26,037 more freight cars were continuously employed in 1944 than in 1943 to carry a like amount of traffic.

The high level of commodity loading obtained during the war period, the report went on, "has been due perhaps principally to the beneficial operation of General Order ODT 18A but the spontaneous and voluntary response of receivers and shippers has been most constructive toward the ends sought, and much credit for results is due to this cooperative effort." With the end of O. D. T.'s wartime controls, the Car Service Division anticipates some loss of shippers' interest in heavier loading. Thus it suggests the advisability of thought being given to measures for continuance of heavy-loading practices to the largest possible extent.

Economies of Heavy Loads—"The advantages to the railroads in a high average load are very great," the report said. "Advantages also accrue to the shipping public through decreased cost of railroad operations, in that there is caused no appreciable increase in overhead or operating expense, as would be the case if there were an increase in the number of cars loaded. Reports of studies by competent engineers have indicated that there is 41 per cent less tractive effort required to move 50 tons in one car on level track than would be required for the same tonnage loaded in two. Furthermore, any reduction in the number of cars handled for the same loading is a helpful contribution to the liquidity of terminal and interchange operations."

The report's section on freight car efficiency asserted that the three major factors in securing the greatest practicable degree of efficiency in car handling are: The best practicable degree of observance of Car Service Rules; accelerating the turn-around time of cars through reducing to the minimum loss of car days in loading, unloading and movement; and the heaviest practicable loading of every car. The subsequent discussion devotes considerable attention to the present dislocation of freight cars and the problem of getting such equipment back to home roads where it may be repaired—for "the home road has better facilities for repairing its own equipment and has greater interest in seeing that repairs are efficiently done." It is pointed out that the relocation will be accomplished by observance of the car service rules which provide for loading of freight cars "to or toward owners' rails."

Outlook for '46—Meanwhile the report had referred briefly to the 1945 accomplishments of the division, stating generally that such accomplishments are reflected in the overall performance of the railroads in taking care of traffic offered. "During the course of the year," it went on, "all-time peak records were established in the volume of export freight moved through our ports and in the movement of grain and grain products. While the supply of cars of various types has been continuously close, the available supply has been distributed to best advantage and with the result that there has been a minimum

(Continued on page 158)

Chicago Sun Attacks Rock Island Trustee

Alleges dictation of reorganization managers and influencing purchases

While Senators Wheeler of Montana and Reed of Kansas are preparing, according to announcement from Washington, to make a general investigation of railroad trusteeships under section 77 of the Bankruptcy Act, the Chicago Sun has been publishing a series of articles containing charges against the way in which the trusteeship of the Rock Island is being handled.

The federal judge in control of the Rock Island is Michael L. Igoe, an appointee of President Roosevelt. The road has two trustees. One is Joseph B. Fleming who was appointed 12 years ago by Judge Wilkerson, now retired. The other trustee is Aaron Colnon, who is engaged in the real estate business in Chicago and who was appointed by Judge Igoe in April, 1943. The Chicago Sun is owned and published by Marshall Field and is a strongly New Deal paper.

"Here are some of the facts revealed by the Sun's inquiry," according to an article which appeared in that newspaper of January 2.

"Before Judge Igoe approved the Rock Island reorganization plan last spring, he had already obtained nominations for a reorganization board—which he has yet to appoint—from creditor committees empowered to designate the board members. This board will be under control of the court, with broad powers over Rock Island's future destiny. The nominees include friends of Colnon and Igoe and were named after Colnon discussed the makeup of the reorganization board with representatives of the creditor committees. . . .

"Colnon has been the dominant influence in Rock Island's administration since he became trustee, although the road has a second trustee . . . whose authority theoretically is equal to that of Colnon. There has been friction between the two trustees, and when disagreements were brought to Judge Igoe, Colnon won the decision.

"By his own admission to this reporter, Colnon, as trustee, has helped friends in the railroad supply field to get orders from Rock Island. . . .

"Rock Island's long-time policy of competitive bidding in buying insurance was abandoned on Colnon's insistence over protest of his co-trustee, under a court order from Judge Igoe. Colnon arranged for appointment of a large insurance agency headed by friends as exclusive agent for placing Rock Island policies. But first he made an off-record deal with the agency to give a cut of its commissions on Rock Island policies to a close pal, an insurance broker, solely as a personal favor.

"Rock Island's contract for purchase of welding gases was transferred at Colnon's suggestion, without competitive bidding, to a firm which soon afterward appointed Colnon's real estate company as its Chicago building manager.

"Judge Igoe inherited, in 1940, the Rock

Island case, along with other important receiverships, from Judge James H. Wilkerson, now retired. This litigation has been dragging through federal court proceedings since June, 1933, when the Rock Island, like many other roads then facing financial difficulties, petitioned for reorganization under the bankruptcy act. The case finally has reached the stage where a long-delayed reorganization plan is awaiting acceptance by creditors. Before this stage could be reached, the court had to approve the plan, which was issued by the Interstate Commerce Commission as provided by law.

"The first I. C. C. plan was issued Oct. 31, 1940, but various modifications were made, due to objections by creditors and the court, and the commission's final draft came out May 1, 1944. Judge Igoe had a final hearing on it June 23, 1944, and then took nearly a year—until last May 14—to file an opinion expressing approval. He issued his formal order of approval June 15.

"He gave his O. K. just after candidates for the reorganization board had been agreed upon by representatives of creditor committees who had met with Colnon on the subject. While that happened months ago, the court must wait for acceptance of the I. C. C. plan by creditors before appointing a reorganization board. . . . The plan provides for appointment of five reorganization managers by specified creditor-groups 'subject to ratification of the court.' The proviso for court ratification was insisted on by Igoe before he gave approval. It was written into the plan by the I. C. C. only after Igoe sent the reorganization proposal back to the commission for that purpose and for one other amendment. . . . According to high-placed sources who have big stakes in the Rock Island reorganization, the creditor committees learned that even though the court has power only to reject their appointments, it would be advisable for them to make their selections in the first instance from a list of names proposed by Colnon and agreeable to Igoe.

"Colnon denied that assertion, although confirming the names of the five prospective reorganization managers obtained by the Sun from other sources, and the fact that they were agreed upon before Judge Igoe approved the reorganization plan.

"Colnon's version of the story, as related to the Sun, is that spokesmen for the creditor groups who met with him proposed the five names on their own initiative, without any suggestion from him or from Igoe. It is admitted by Colnon that one of the five nominees is a warm crony of Judge Igoe, two others are friends and business associates of Colnon and are acquainted, at least, with Igoe, and a fourth is a business acquaintance of Colnon. The other Rock Island trustee, Joseph Fleming, had no part in any of the discussions about candidates for the reorganization board. Colnon's explanation of this is that the parties who proposed the candidates knew that Colnon is 'closer to Judge Igoe than Fleming is,' and naturally turned to him to ascertain if their selections would be acceptable to Igoe.

"The importance of the reorganization board lies in the broad powers assigned to it by the I. C. C. plan to carry out the proposed reorganization 'under the super-

vision and control of the court.' . . . The reorganization board will select the members of the first board of directors of the reorganized company. The new board of directors will elect the officers who will control Rock Island operations, the hiring and firing of personnel and the purchase of equipment and supplies running into millions of dollars a year.

"The prospective reorganization managers, as confirmed by Colnon, are:

"Edward J. Fleming—An intimate friend of Judge Igoe and friend of Colnon. . . . He is head of the Fleming Coal Co., which has offices in one of the buildings managed by Colnon's real estate firm. According to Colnon, Fleming's name was proposed by spokesmen for junior creditors holding Rock Island convertible bonds.

"Ward T. Huston—Real estate operator associated with Colnon in the building corporation which owns the 208 S. La Salle St. building. Colnon's real estate company has offices there and manages the building. In Poor's Register of Directors and Executives for 1945, Huston is listed as vice-president and Colnon as secretary of the 208 S. La Salle Corp. Huston . . . is slated as the appointee of the committee representing holders of first and refunding mortgage bonds and secured bonds, by far the largest group of Rock Island creditors.

"Roy Tuchbreiter—Head of the Continental Casualty Co. and the Continental Assurance Co. and close business friend of Colnon. The Continental Companies Building, . . . owned by Tuchbreiter's insurance companies, is managed by Colnon's real estate firm. The Continental Casualty Co. underwrites Rock Island fidelity insurance, placed with it by the agency now representing Rock Island through Colnon's intervention. . . . Tuchbreiter was chosen to be reorganization manager for the Rock Island general mortgage bondholders' committee.

"Charles Oscar Kalman—St. Paul capitalist and investment dealer, with widespread interests in large industrial and commercial corporations. Colnon referred to Kalman as a business acquaintance, and said Kalman was proposed for reorganization manager by the creditor group comprising bondholders of Rock Island subsidiaries.

"James Norris—Chicago multimillionaire, head of the Norris Grain Co. . . . The general opinion among sources interested in the Rock Island reorganization is that Norris is a 'natural' choice for reorganization manager because he and members of his family own extensive holdings in Rock Island bonds. He is to be appointee of the trustees for Rock Island's general mortgage, first and refunding mortgage and secured bonds.

"An influential member of one of the large creditor committees told the Sun that the names of prospective reorganization managers 'actually were forced upon us in one of the most high-handed procedures in the history of railroad reorganizations. The obvious inference was that the reorganization plan would not be approved unless we agreed in advance to a hand-picked list of reorganization managers acceptable to the court, without the privilege of exercising our lawful rights to make voluntary appointments.'

In an article published on January 5 the Chicago Sun said: "Under the new insur-

ance deal, Rock Island's premium costs have gone up at least \$25,000 a year, or more than 10 per cent."

In an article on January 6 the Chicago Sun published alleged details of the purchase by the Rock Island, through the influence of Colnon, of pipe from the Federal Pipe & Supply Company of Chicago. It said Judge Igoe stated he owns 300 shares of the 1,000 shares of stock of this company, and "disclosed that he had been getting yearly dividends of \$20 a share on his Federal Pipe stock, or \$6,000 a year, which he agreed was a 'pretty nice return.' . . . In discussion of Rock Island business dealings with the Federal Pipe & Supply Company . . . Igoe . . . said he had nothing to do with Rock Island buying anything from Federal Pipe and, furthermore, that he knew nothing about it until last summer, and that he ordered the practice stopped as soon as he heard of it." The Sun asserts, however, that pipe was bought from this company as recently as last November.

Railroad Magnaflux Conference at Chicago, February 11 and 12

A Railroad Magnaflux Conference, sponsored by the Magnaflux Corporation solely for persons working in the railroad field, will be held February 11 and 12 at the Congress Hotel, Chicago. Emphasis during the entire two days will be on the exchange of information by attending personnel, with particular attention given to the management viewpoint. Those desiring to visit the plant and laboratories of the Magnaflux Corporation will be welcomed on Wednesday, February 13. The program for the two days is as follows:

| | |
|---|------------|
| Monday, February 11 | |
| 8:30 to 9 a.m. | |
| Registration | 9 a.m. |
| Opening talk by F. B. Doane, president, Magnaflux Corporation | |
| Use of Magnaflux by Railroads, C. E. Betz, vice-president, Magnaflux Corporation | |
| Use of Zyglo in the Railroad Field, W. E. Thomas, manager of field engineering, Magnaflux Corporation | |
| Discussion of Inspection of Track, Tools, and Parts During Reclamation, Ray McBrien (chairman), engineer of standards and research, D. & R. G. W. | 12:30 p.m. |
| Lunch | 2:30 p.m. |
| Discussion of Inspection of Railroad Car Parts, Charles B. Bryant (chairman), assistant to vice-president, Southern | |
| Tuesday, February 12 | |
| 9 a.m. | |
| Discussion of Inspection of Steam Locomotive Parts, A. H. Halley, welding supervisor, Canadian Pacific | 12 noon |
| Lunch | 2 p.m. |
| Discussion of inspection of Diesel Locomotive Parts, M. C. Haber (chairman), mechanical engineer, Union Pacific | |
| "Management Problems" and conclusion, C. E. Betz, vice-president, Magnaflux Corporation | |

Pressed Steel Car Reports \$20,000,000 Backlog

The unusually heavy volume of orders recently placed by American railroads for new freight and passenger cars, coupled with a huge potential demand as conditions permit, assures capacity production by most of the leading car manufacturing companies during at least the first half of 1946, according to a statement by Ernest Murphy, president of the Pressed Steel Car Com-

pany, on January 7. Mr. Murphy lauded the outstanding accomplishments of the railroads during the war period in the face of minimum replacements of equipment, and described their contribution as a major factor in our victory.

Discussing the prospects of Pressed Steel Car for the coming year, he said, "We have a backlog of orders presently amounting to approximately \$20,000,000, sufficient to maintain continuous production during the first half of 1946, during which time we anticipate receiving additional business for production during the second half of the year. Our reconversion program is advancing rapidly and with the vast potential market ahead for home appliances, the domestic appliance division—"Presteline"—expects to have a very successful 1946."

41.9 Million Cars Loaded Last Year; 3.5% Decrease

Loading of revenue freight on the railroads of the United States in 1945 totaled 41,901,051 cars, according to the Association of American Railroads.

This was a decrease of 1,507,244 cars, or 3.5 per cent, below the total for 1944, which was 43,408,295, and also was a decrease from the total for 1943 and 1942. As shown in the following tabulation of total loadings for the years 1945 and 1944 by commodity groups, the largest decrease was in forest products loadings, while loadings of grain and grain products showed an increase of 8.5 per cent. Loadings of grain and grain products in 1943 totaled 2,647,665 cars, and in 1942, 2,177,122 cars.

The commodity data follow:

| | 1945 | 1944 | Per Cent Increase | Per Cent Decrease |
|--------------------------------|------------|------------|-------------------|-------------------|
| Grain and grain products | 2,734,308 | 2,520,733 | 8.5 | .. |
| Live stock | 893,696 | 892,145 | .2 | .. |
| Coal | 8,294,375 | 8,889,518 | .. | 6.7 |
| Coke | 694,618 | 750,685 | .. | 7.5 |
| Forest Products | 2,039,375 | 2,271,450 | .. | 10.2 |
| Ore | 2,474,436 | 2,648,589 | .. | 6.6 |
| Merchandise, L.C.L. | 5,525,749 | 5,427,928 | 1.8 | .. |
| Miscellaneous | 19,244,494 | 20,007,247 | .. | 3.8 |
| Total | 41,901,051 | 43,408,295 | .. | 3.5 |

Wartime Rail Service Credited to Teamwork

(Continued from page 155)

of criticism by reason of delay in furnishing equipment to move the traffic. This accomplishment required in some cases the issuance of special car orders covering certain types of cars and the policing of their observance; the establishment of quota orders directing the westbound flow of box cars to move last year's grain and this year's record crop."

Outlining the work programmed for 1946, the report said that, in addition to handling car supply matters which arise from day to day, the division's activities will be directed along the following lines: A concerted drive to secure better compliance with Car Service Rules and the resultant relocation of cars to owners; continued functioning as liaison between the railroads and the armed services in connection with troop movements; and continuing to act as the agency of the railroads handling the daily dissemination of embargo notices and as agent of the rail-

roads in connection with I. C. C. service orders.

Meanwhile, as the report put it, the division's "principal function" will continue to be "the supervision of the countrywide distribution of freight cars of various types and the making of the best possible arrangements through voluntary cooperation of carriers or orders where necessary, to the end that cars may be distributed in accordance with the needs of commerce, and so to avoid any serious car stringencies."

Port Traffic—The remainder of the report is devoted largely to discussions of activities of the division's various sections, such discussions embodying a review of car supply conditions throughout the year. During the period under review, the Port Traffic and Tank Car sections, which had been organized for war service, were abolished. When the report was written, information in the hands of the Military Transportation Section indicated that January, 1946, would be the peak month of troop movements—"though no firm data are available."

The report's review of activities of the Shippers' Advisory Boards stated that the interest of members had been maintained throughout the year, the boards' "outstanding accomplishment" being found in the work of the 601 Freight Car Efficiency Committees which operated in 856 communities. Car detention reports covering the 52 weeks prior to the time of the report's preparation indicated that only 15.5 per cent of the cars placed for loading or unloading had been held beyond the 48-

such matters as "trade barriers" and "alleged" government subsidies to truckers. There is no need for Congress to investigate "trade barriers," it said. The "facts" already have been brought out in investigations, and the thing that is lacking is "appropriate" action thereon. Likewise it was perfectly clear to the truckers' organization that "federal aid" in highway construction is not a subsidy, as the railroads keep contending, but merely a way for the government to carry out its "duty" to provide good transportation.

But the "failure" of the I. C. C. was the principal flaw in the national transportation picture as sketched by the truckers. "The commission's interpretations of its authority disclose a definite pattern of favoring the railroads to the detriment of other types of carriers," the statement commented, and it went on to declare that "in several important instances," the commission has "flouted the intention of Congress" and "distorted the plainly expressed purposes" of the Interstate Commerce Act by a "wooden use of the maxim of statutory construction that specific provisions override general provisions when there is a conflict between them."

Pullman Workers Cut Accidents

Regardless of a stepped-up tempo of operations brought about by war-time conditions, the 36,000 employees of the Pullman Company chalked up a seven per cent reduction in accidents during the first 10 months of 1945. The frequency rate dropped to 4.15 as compared with 4.46 for the similar period of the preceding year. Leading the safety record were the company's big shops at Chicago; St. Louis, Mo.; Buffalo, N. Y.; Wilmington, Del.; Richmond, Cal., and Atlanta, Ga., with only one accident in a total of 7,816,000 man-hours worked. The 10 company owned laundries and the commissary department worked 1,892,000 and 403,000 accident-free man-hours respectively.

Urges Adequate Motor Truck Fees

Governor Walter E. Edge, of New Jersey, in his message to the legislature on January 8, pointed out that the low registration fees for highway common carriers in New Jersey are indefensible. "I earnestly recommend to the legislature," he said, "that it give immediate consideration to producing additional revenue for the state through increasing registration fees on trucks and motor carriers. Present license charges are out of all proportion to the service given and the damage done to out superhighways."

"Much of the cost of our highway construction results from the tremendous truck traffic, both inter- and intra-state. New Jersey is virtually the main line for all north and south through truck traffic in the East. The great weight of these vehicles necessitates much more expensive highway construction than would be required for passenger vehicles alone."

"Under present law these commercial vehicles pay a minimum license fee of \$10 and a maximum of \$99 for vehicles up to 30,000 lb. of gross weight. These fees are entirely inadequate for the service rendered

hours free time. This compares with 18.27 per cent for the previous 12 months.

"There is no question but that the work of the efficiency committees has been a real factor in assisting the railroads in successfully handling the tremendous war-time traffic," the report continued. "Their cooperation in securing more prompt loading, unloading and heavier loading of cars is a matter which commands the appreciation of all railroad interests."

Truckers Tell Lea Just What Ails Them

(Continued from page 154)

carrier competition." Railroad-controlled truck operations, it went on to say, have "consistently" lost money, yet the allegedly railroad-inspired program for the integration of all forms of transportation into a few large transportation systems is still being advocated as a means of securing better service and greater efficiency.

Other transportation questions about which the A. T. A. expressed concern, in its statement to the committee, included

these trucking companies by the construction of multi-lane through highways traversing the state. Examination of the present registration reveals an exceptionally high registration at the maximum of 30,000 lb. In other words, there are 4,064 registrations for vehicles of 30,000 lb. or over, far more than in any other classification except those of 10,000 lb. and below. All told, the State of New Jersey receives approximately \$5,000,000 annually from commercial registrations, as compared to \$15,000,000 from lighter or pleasure vehicles. Our position in regard to truck taxation is indefensible when compared with other industrial states, and I urge that you give this question your most careful attention."

Freight Car Loadings

Loadings of revenue freight for the week ended January 5 totaled 652,457 cars, the Association of American Railroads announced on January 10. This was an increase of 146,306 cars or 28.9 per cent above the preceding week, a decrease of 30,941 cars or 4.5 per cent below the corresponding week last year, and a decrease of 117,172 cars or 15.2 per cent below the comparable 1944 week.

Loading of revenue freight for the week ended December 29 totaled 506,151 cars, and the summary for that week, as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For the Week Ended Saturday, December 29

| | 1945 | 1944 | 1943 |
|--------------------------------|---------|---------|---------|
| Eastern | 106,020 | 114,286 | 126,779 |
| Allegheny | 111,360 | 128,242 | 144,350 |
| Pocahontas | 26,974 | 33,721 | 46,455 |
| Southern | 74,442 | 85,757 | 97,479 |
| Northwestern .. | 60,166 | 66,857 | 70,479 |
| Central Western .. | 84,372 | 97,979 | 99,503 |
| Southwestern .. | 42,817 | 58,034 | 58,399 |
| Total Western Districts | 187,355 | 222,870 | 228,381 |
| Total All Roads | 506,151 | 584,876 | 643,444 |
| Commodities | | | |
| Grain and grain products | 34,886 | 36,087 | 40,689 |
| Live stock | 11,532 | 10,411 | 11,592 |
| Coal | 100,906 | 115,489 | 147,221 |
| Coke | 12,918 | 13,045 | 15,283 |
| Forest products .. | 15,841 | 21,430 | 29,788 |
| Ore | 7,715 | 8,923 | 11,810 |
| Merchandise l.c.l. .. | 87,663 | 83,548 | 88,248 |
| Miscellaneous .. | 234,690 | 295,943 | 298,813 |
| December 29 .. | 506,151 | 584,876 | 643,444 |
| December 22 .. | 688,300 | 762,972 | 641,036 |
| December 15 .. | 771,594 | 750,242 | 758,881 |
| December 8 .. | 776,375 | 793,156 | 823,311 |
| December 1 .. | 803,770 | 807,836 | 862,733 |

Cumulative Total,

52 Weeks.... 41,901,051 43,408,295 42,439,951

In Canada.—Carloadings for the week ended December 29 totaled 42,342, as compared with 64,698 for the previous week and 44,926 for the corresponding period last year, according to the compilation of the Dominion Bureau of Statistics.

| | Total Cars Loaded | Total Cars Rec'd from Connections |
|-------------------------------|-------------------|-----------------------------------|
| Totals for Canada: | | |
| December 29, 1945 .. | 42,342 | 28,225 |
| December 30, 1944 .. | 44,926 | 30,390 |
| Cumulative Totals for Canada: | | |
| December 29, 1945.... | 3,614,425 | 1,809,813 |
| December 30, 1944.... | 3,658,671 | 1,989,529 |

Seaboard Derailment at Blaney

The Seaboard Air Line's 17-car "East Coast Silver Meteor", drawn by a three-unit Diesel locomotive and bound from New York to Miami, was derailed at 5:15

a.m., January 2, near Blaney, S. C., resulting in the death of two passengers and injuries to 20 others. The third Diesel unit and 14 cars left the tracks. It has been established that the accident was caused by a broken rail due to a transverse fissure.

The Seaboard advises that the rail, weighing 100 lb. per yard, "was rolled and laid in the track at the location where the accident occurred during 1935. A Sperry detector had been operated over this particular piece of track in March, 1945, and again in October, and no transverse fissures or any other defects, were found in this vicinity on either of the inspection trips."

Atlantic Board Will Honor R. W. Brown at Luncheon

In appreciation of his service as chairman of the Railroad Contact Committee of the Atlantic States Shippers Advisory Board for the past five years, R. W. Brown, president of the Reading, will be given a testimonial luncheon sponsored jointly by the shipper organization and the Traffic Club of Philadelphia, Pa., on January 17.

The luncheon, which will be in connection with the twenty-second annual meeting of the board, will be addressed by Colonel J. Monroe Johnson, director of the Office of Defense Transportation. Clare J. Goodyear, president of the National Association of Shippers Advisory Boards, is head of the committee in charge of the arrangements.

At the morning business session of the board, Warren C. Kendall, chairman of the Car Service Division, Association of American Railroads, will speak on the national transportation situation. The organization's various committees will present reports, and officers will be elected. Joseph A. Quinlan, president of the shipper body and vice president of the St. Regis Paper Company, will preside.

On January 16, three of the principals at the meeting will participate in a round-table discussion on the transportation outlook over Station WIP in Philadelphia. Those who will be heard on this program, which will be broadcast from 1:30 to 1:45 p.m., are Mr. Brown, Mr. Goodyear and Mr. Quinlan. Albert R. Beatty, manager of the Publicity Section of the Association of American Railroads, will act as the moderator.

Court Acts in Final Pullman Sale Decree

(Continued from page 155)

the employees of the Pullman Company under existing contracts and practices."

In a letter to stockholders, January 2, D. A. Crawford, president of Pullman, Inc., expressing the opinion of management in the sale of the sleeping car services to the railroad buying group called it "the most practical and desirable solution that could be worked out within the rigid requirements of the court's 'complete and perpetual separation' decree."

He added, "The railroads constituting the buying group are proceeding actively with the purchase of many new sleeping

cars, and there is abundant indication that they intend to make every effort to maintain and expand the sleeping car business after it comes into their ownership. These considerable investments of new money by the railroads give the best possible assurance that the first-class rail passenger service—which is the service performed in sleeping and parlor cars and in which lie the working activities of the Pullman operating organization—will receive effective support from the now-100 per cent railroad interest, in merchandising this service and in meeting the competition of other agencies and methods of passenger transportation."

Mr. Crawford told the stockholders it was "yet too early" to account the financial results of the sale of the Pullman Company. He viewed also as "premature" any statement which he might offer in regard to disposition of the resultant increase in the net current asset position of Pullman, Inc. until, among other things, "it is definitely known whether or not an appeal to the U. S. Supreme Court will be taken from the final order of the District Court."

It has not been disclosed whether any such action will be taken by any of the bidding groups, as was hinted variously throughout the proceedings. The other bidders were: Otis & Company, of Cleveland, representing the Young-Otis group; Glore-Forgan, investment brokers, Chicago; and Standard Steel Spring Company, of Coraopolis, Pa.

Calls for Care in Handling Auto Loading Racks

Chairman Warren C. Kendall of the Car Service Division has asked railroad transportation officers to direct the attention of car handling forces to the "importance of a strict observance of the regulations covering the proper operation and storing of automobile loading racks." The request came in a January 3 circular which stated that several roads owning device-equipped auto box cars have complained that a large number of such cars, after one loaded trip with automobiles, are being returned "with racks laying on the floor or suspended from cables between floor and roof, resulting in considerable damage to the racks and necessitating shopping with rather extensive repairs before again being restored to service."

A. A. R. Fire Protection Group to Meet in New York

The regular mid-winter meeting of regional members of the Fire Protection and Insurance section of the Association of American Railroads, will be held January 15, at 10 a. m., in Room 1568 (New York Central Conference Room), at 230 Park avenue, New York.

Among the subjects to be discussed are: Protection for Diesel locomotives, with reference to new applications of special fog nozzles recently developed for this kind of service; the more extensive use of metal lath and plaster as a fire-retarding construction; and flame proofing in general. A new type of surface coating for wood and fibre to delay flame action will be demonstrated.

With the Government Agencies

Expects Roads to Buy Surplus War Facilities

Carriers are interested in rail facilities and real estate, report says

Railroad companies will provide the market for many military installations of railroad facilities in this country and the carriers are also potential purchasers of other installations comprising "large tracts of real property, such as airfields, camps, depots, shipyards, and terminals located near centers of population, with a view to development as industrial warehousing property," according to a Surplus Property Administration report on "Transportation Facilities," which was submitted to Congress last week. The report is pursuant to that provision of the Surplus Property Act which requires a submission with respect to the disposal of any facility costing the government not less than five million dollars.

Nature of Property—Because "the adaptation of the railroads to the wartime situation was in large part accomplished by the carriers themselves with the introduction of improved operating practices and the purchase of additional equipment under the general supervision of government agencies," the report notes that government-built railroad facilities are in the main yard and access tracks and supporting facilities to serve military camps, airports, supply depots, hospitals, and other military installations as well as to serve new industrial plants. In addition a few abandoned roads were rehabilitated, some trackage was reinforced to withstand the impact of heavier loads, and bridges were reconstructed as emergency railroad river crossings. But no railroad installation alone involved a government expenditure of as much as five million dollars.

Meanwhile an aggregate of \$343,331,000 was involved in expenditures for 44 airports, each of which cost more than five million dollars. And 200 other airports costing less than five million dollars each have been declared surplus. The report's overall estimate is that the 1940-1944 expenditure on military installations relating to transportation was 3.2 billion dollars "of which perhaps one-half to two-thirds can be regarded as applicable to airport facilities." Next in importance from the standpoint of expenditures was the development of port terminal facilities.

Getting Rid of Airports—With respect to the disposal of airport facilities, the report interprets existing law in such a way as to authorize the transfer of such facilities to states, political subdivisions, or

municipalities without a cash consideration, provided other specified conditions are met. The general policy with respect to disposal of port facilities will be the same. If such properties are not desired by public authorities, they will be disposed of in the most expedient manner to private purchasers.

As noted at the outset, the railroads are expected to provide a market for surplus railroad facilities as well as for other advantageously situated properties. "Railroads," the report says, "have a well-established policy of increasing traffic by purchasing real property which is subdivided into small sites for sale or lease to various industries. As most of the industrial property available to railroads is now occupied, the sale of such government-owned property to the railroads would provide sites for small business and stimulate employment."

"There are other facilities for which the railroads are the only potential purchasers in place and which they should regard as desirable additions to their existing facilities. Examples are Arlington Yards, the emergency Potomac river crossing, the Claiborne-Polk military railroad in Louisiana, and the line extending from Westlake, La., to a point five miles south and serving new plants producing aviation gasoline, chemicals, magnesium, and rubber."

Carriers Are Interested—"In order to establish the interest of the railroads as possible purchasers or lessees of the facilities joining their properties, an inquiry has been sent to every railroad in the country through the agency of the Association of American Railroads. The number of replies already received to the inquiry indicates a wide interest in acquisition on the part of the railroads."

"It is anticipated that all properties in which the railroads are interested can be disposed of by direct sale. Actual negotiations will in some cases be complicated by the fact that it will be necessary for the railroads to secure certificates of convenience and necessity from regulating commissions and for terms to be arrived at which are satisfactory to such commissions."

Emergency Board on Frisco

President Truman on January 5 appointed an emergency board to investigate a dispute between the St. Louis-San Francisco and its employees represented by the Brotherhood of Railroad Trainmen, which had called a strike for the 6th. The dispute originally involved the brotherhood's demand for cancellation of an agreement permitting use of road crews in certain yard work, but the emergency board will also have before it other alleged grievances which would normally be handled by the National Railroad Adjustment Board but which were included on the strike ballot.

Truckers' Post-war Prospects Analyzed

Commerce Department report finds merit in complaint against rail l.c.l. rates

"One of the most serious problems facing the for-hire trucking industry is how to improve its competitive position with respect to rates and costs," says a Department of Commerce report which also finds "some support for the motor carriers' claim that the rail level of l.c.l. rates places them at a disadvantage." The survey, made public this week, is the November-December, 1945, industry report on "Domestic Transportation," prepared by the Bureau of Foreign and Domestic Commerce's Transportation Unit which is headed by James C. Nelson.

Except for a brief listing of "important developments" in transportation generally, the report is devoted to a discussion of "The Problem of Post-war Service Standards in Motor Freight Transportation." A similar survey covering railroad transportation was issued last fall, as noted in the *Railway Age* of November 3, 1945, page 731.

Wary of Bulwinkle Bill—House passage of the Bulwinkle bill to stay operation of the anti-trust laws with respect to carrier agreements approved by the Interstate Commerce Commission and final enactment of the Boren bill to repeal remaining provisions of the land-grant-rate law, effective October 1, 1946, are listed among the "important developments." Of the Bulwinkle bill the report has this to say: "The question of public policy raised by this proposed legislation is whether the traditional emphasis upon competition in transportation, even under regulation, should be reduced by granting anti-trust law immunity to associations of carriers so that they might agree privately upon rates and services. This is a question of basic importance which should be fully considered by all public elements interested in transportation."

The comment on the land-grant-rate repealer asserts that the main significance of that legislation is that the government "will be required to pay the full rates and fares for movement of property and personnel by rail instead of 50 per cent of those charges." This over-simplification, of course, overlooks the fact that land-grant discounts available to the government have averaged much less than 50 per cent, for the 50 per cent basis applies only on routes made up of or competing with land-grant mileage over the entire distance. Also, it overlooks contract rates made with the government under section 22 of the Interstate Commerce Act, which may be expected to keep

government rates on much traffic below the full commercial level.

The finding of "some support" for the truckers' complaint against railroad l.c.l. rates followed from a brief review of the motor carriers' unsuccessful effort to have the I. C. C. do something about that matter in its recent decision in the No. 28300 investigation of the class rate structure. While it is conceded that railroad l.c.l. costs have been reduced as a result of the heavier loading required by Office of Defense Transportation orders, it is predicted that "these costs will again rise as the average load per merchandise car declines."

Sees Higher l. c. l. Costs—"Already," the report continues, "a downward trend in average load per l.c.l. car is evident, and in the absence of railroad cooperation in retaining heavier loads after the expiration of General Order ODT No. 1, it is possible that the average loading will decline nearly to its pre-war level. Thus, if loading reverts to the pre-war level, the claim of the truck lines that rail rates on l.c.l. traffic do not cover costs may be justified, if the findings of the commission in Docket 28300 are borne out by further studies, some rate action designed to allocate traffic more economically."

"One effect of the rate-cost relationship in trucking has been some abandonment of bidding for certain classes of traffic. Through so-called minimum class-rate stops, the effective charges on low-rated commodities are increased. To an indeterminate degree, this practice results in a diversion of traffic in such commodities to rail carriers, who may not necessarily be as well fitted to handle this traffic. On the other hand, some of the truck lines showing poor financial results have been found to have carried unsuitable types of traffic which produced insufficient revenues for profitable operation."

"The suggestion made by the commission in its report denying modification of the class-rate reductions, that the railroads give careful consideration to their l.c.l. rates to insure that they are on a compensatory level, seems well-advised. It seems probable that if the heavier loading of merchandise cars, and the attendant economies, cannot be retained, some adjustments will have to be made in rail rates on traffic for which truck lines compete."

Trucks Lost Ground in War—Generally, the report finds that the intercity for-hire trucking industry lost some ground to the railroads during the war, but it sees several new lines of possible profitable future development for the industry. These "promising opportunities" include use of trucks "as extensions of assembly lines, as conveyors of parts and subassemblies between plants located relatively short distances apart"; short-haul operations as carriers of petroleum products; and pick-up and delivery services for airlines.

Meanwhile the report's review of the trucking industry's wartime experience included considerable discussion of I. C. C. policy on the matter of "restrictive" certificates and the use of its emergency powers to modify certificates. In this connection there is much reliance on reports of the defunct Board of Investigation and Research

and implied criticism of the commission for its alleged failure to use its authority in a way which would give full sway to the "flexibility" of motor transportation. The commission's use of its wartime emergency powers, it is asserted, "probably fell far short of the potential savings which could have been gained by removal of restrictions which impede the fullest utilization of trucks."

Looking ahead on the matter, the report says that inquiries received by the Department of Commerce indicate a "widespread interest" on the part of returning veterans regarding possibilities in the trucking field. It adds that the commission now has an opportunity to give "full weight" to B. I. R. findings on this matter of operating restrictions in truck certificates; and goes on to mention evidence that the "smaller operators are more circumscribed with respect to operating restrictions than the larger regular-route common carriers."

"To whatever extent commission policy encourages the organization of the for-hire trucking industry into a limited number of large firms, through commodity, route, territorial and return-haul restrictions upon smaller companies and denials of new-service and extension applications, competition within the industry is lessened," the report continues. "This result should be interpreted in the light of efficiency and economy to the public rather than merely in terms of its bearing upon profitability. The information presently available does not tend to support the proposition that these two criteria are best satisfied by such a policy."

Another wartime development discussed in the report is the relaxation of state regulations governing maximum sizes and weights of motor vehicles. "The experience of the war," the report adds, "should demonstrate the benefits to be gained from a permanent lifting of many such barriers upon interstate commerce."

Union Demands Better Seating in Engine Cabs

The Brotherhood of Railroad Trainmen has filed a complaint with the Interstate Commerce Commission, alleging that the Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe, and Western Pacific are operating steam locomotives in violation of the Locomotive Inspection Act in that they are "not equipped with adequate seating facilities for the use of brakemen and trainmen," and asking the commission, after hearing, to require the installation of seating equipment meeting suggested specifications.

I. C. C. Reopens Case Involving Greyhound "Infiltration"

The Interstate Commerce Commission has reopened for hearing at a time and place to be later assigned the No. MC-F-2944 proceeding wherein Division 4's recent report dismissed for lack of jurisdiction a Greyhound Corporation application for authority to purchase additional voting trust certificates representing 3,500 shares of stock in the Cincinnati & Lake Erie Transportation Company. Division 4's report was noted in the *Railway Age* of November 3, 1945, page 729.

As reported there, Greyhound already owns certificates for 6,500 shares or 19.87 per cent of the total C. & L. E. stock outstanding, and the additional 3,500 would give it certificates covering 30.57 per cent of the total. The action of the division majority drew a dissent from Commissioner Mahaffie who protested against his colleagues' condonation of what he called the "process of infiltration" whereby Greyhound was increasing its interest in C. & L. E., and suggested that the commission give consideration to recommendations for legislation giving it authority to check the process.

Joins A. M. G. in Germany

A. B. Cole, who recently resigned as material analyst, Division of Materials and Equipment, Office of Defense Transportation, has joined the Office of Military Government in Germany. Mr. Cole will be stationed in Berlin as chief reports officer, Executive Branch, Transport Division.

O. D. T. Leaves Puerto Rico

The Office of Defense Transportation has announced the resignation of M. G. De Quevedo, director of its Division of Puerto Rican Transport from its establishment October 20, 1942, until its termination November 30, 1945. From May 17, 1943, to July 1, 1944, the O. D. T. operated the American Railroad of Puerto Rico as a result of a labor dispute; Mr. De Quevedo acted as federal manager of the property during this period.

Rear-End Collision Is Result of Passing Stop Signal

A rear-end collision on an 8 deg. 30 min. curve 2,117 ft. west of South station, Boston, Mass., on November 17, 1945, in which 106 passengers and 12 employees were injured, was the result of failure to obey an interlocking signal indication, according to a report of an investigation by the Interstate Commerce Commission under the supervision of Commissioner Patterson.

In the vicinity trains are operated in either direction on the 4-track line by signal indication controlled from a tower 810 ft. east of the point of the accident. The line is owned by the Boston Terminal, but the trains involved were operated by the Boston & Albany, on tracks regularly used by it. A 15-m. p. h. speed limit was effective, and under the rules trains were required to come to a stop at a signal displaying that indication and not to pass it until its indication changed to proceed, except on definite instructions from the interlocking tower.

The rules also required employees not to call signals as clear until close enough to be sure they applied to their route, and provided that flagmen should go back a sufficient distance to afford protection when a train stops. Employees stated, however, that flag protection was not required under the circumstances as they understood the rule.

The accident occurred at 3:32 p. m. in clear weather. It involved an engine pushing 6 passenger-train cars westbound, which had stopped for a signal indicating stop, and a westbound passenger train

made up of an engine and 4 cars, which was moving about 15 m. p. h. The following train passed a signal indicating stop at a point 140 ft. east of the standing engine, but the engineer said he thought the indication was proceed, and so called it to the fireman, who was tending the fire. The engineer saw the standing engine and cars ahead, but thought they occupied a parallel yard track until he was too close for an emergency brake application to become effective. Brakes and signals were found to be operating properly. Both engines were derailed and considerably damaged.

Court Says Wisconsin Road Can Be Sued in New York

Although the Green Bay & Western is a Wisconsin corporation, holders of certain of its debentures are entitled to sue in a New York federal court for amounts alleged to be due them, out of the road's earnings, the Supreme Court of the United States has ruled in an opinion by Justice Douglas to which there was no dissent. The case, *Williams vs. Green Bay & Western*, reached the highest court on appeal from an appellate court decision favoring the railroad's contention that the question at issue concerned the internal affairs of a Wisconsin corporation and therefore was not within the jurisdiction of a New York court.

The New York court would not be so handicapped by the circumstances of the case that it should not consider it, the Supreme Court held, and it went on to say that maintenance of the suit in New York would not be "vexatious or oppressive," particularly as the railroad, although its lines are in Wisconsin, maintains a financial and traffic office in New York, maintains a bank account there, holds directors meetings there, and keeps its financial records, minute books and the like there, and as five of its six directors are to be found in New York.

Truckers Try Again for Special Consideration in No. 28300

The American Trucking Associations has asked the Interstate Commerce Commission to reconsider its supplemental report in the No. 28300 proceedings, wherein it ordered adjustments made in the rail class rates in all territories east of the Rocky mountains, on an interim basis, applicable both to carload and l. c. l. traffic. Until enjoined by a special federal court sitting at Utica, N. Y., from putting its order into effect, the commission had fixed January 1 as the effective date of the tariffs making the required rate adjustments.

The supplemental report (described in *Railway Age* of November 10, 1945, page 762) contained, the A. T. A. said, the "first specific rulings on the motor carriers' general position so far issued in these cases." In view of the truckers' "desperate financial straits," it went on to say, the commission has an "immediate duty to act" on their requests for modification of the adjustments at least so far as reductions in l. c. l. rates are required, and this contention was pressed even though other issues are still pending as a result of the litigation under way, which has delayed application of the adjustments.

I. C. C. Holds Up Alternative Rate Experiment

Tariffs wherein Eastern and Southern railroads are proposing alternative rates applicable in connection with different carload minimum weights have been suspended by the Interstate Commerce Commission. The schedules had been published to become effective December 30, 1945, but the commission order suspends them until July 30, 1946, the proceeding being docketed as I. & S. No. 5380 with no date or place of hearing yet assigned.

Designed as an experiment in incentive rates to promote heavier loading and thus more efficient use of equipment, the alternative charges proposed in this suspended schedules would apply to a group of manufactured and miscellaneous commodities moving in large volume.

"The motor carriers' real grievance in this case, and it is a grievance which the commission does not as yet seem to have seriously recognized," the petition said, "is that the National Transportation Policy gives them a direct interest in the proper determination of the rail class rate structure, particularly with respect to those rates applicable to freight competitive traffic moving in l. c. l. quantities."

Spotting Tariff Effective

The joint agency tariff publishing rules governing the receipt and delivery of carload freight at private sidings and industrial tracks in Official territory became effective January 1 when no suspension action came from the Interstate Commerce Commission. The tariff, a revised version of that outlined in the *Railway Age* of August 4, 1945, page 232, represents the Official territory lines' undertaking to preserve spotting-service practices insofar as that is possible under the commission's decisions in the terminal services part of the Ex Parte 104 investigation of railroad practices.

The tariff differs from the original version in that it publishes a charge of \$3.47 per car instead of the "published intraplant rates or charges" for a movement subsequent to a holding because of the inability of the shipper or consignee to accept service. Also it provides that the conductor shall determine when the chargeable time, after the 30-minute free delay permitted, begins to run.

"Adequate Block System" Again Is I.C.C. Recommendation

Following its investigation, under the supervision of Commissioner Patterson, of a head-on collision on the Seaboard Air Line, near Hanlin, Ga., on November 24, 1945, the Interstate Commerce Commission has recommended that that road establish "an adequate block system" on the line involved, which is the main line from Atlanta to Birmingham, Ala. At the time of the accident, trains were operated by timetable and by train orders and a manual block system for following first-class trains and trains carrying passengers,

but the applicable rules, according to the commission report, did not provide for the blocking of opposing trains.

The collision resulted from failure to obey a meet order, the investigation disclosed. Two second-class trains were concerned: Eastbound passenger Second No. 88 (made up of locomotive, 13 passenger train cars, and caboose) and westbound Freight Second No. 89 (made up of locomotive, 28 freight cars and caboose). The crews of each train had received train orders establishing a meeting point at Hanlin, and directing the eastbound train to take the siding.

Five members of the crew of the freight had read and understood the order, but the engineer failed to stop short of the west clearance point of that siding, which the order required unless the eastbound train was in the clear there, and the fireman and front brakeman, both on the locomotive, took no action, all three having "overlooked" the requirements of the order, while the conductor and flagman said that, after their caboose had come even with the siding and they discovered the opposing train was not in the clear there, the conductor opened the conductor's valve, but not soon enough to avert the collision.

The trains collided at a point 769 ft. west of the west switch of the Hanlin siding on a 3-deg. curve where visibility was restricted by embankments and curvature, though it was 9:10 a.m. in clear weather. Both engines, the first car of Second 88 and the first six cars of Second 89 were derailed and damaged. Two employees were killed and 56 passengers and 17 employees were injured.

The road has rules for manual-block operation which, among other things, provide for blocking of opposing trains, the report stated, but these rules were not in effect in the territory involved. "If an adequate block system had been in use in this territory, these opposing trains would not have been permitted to occupy the same block simultaneously," it added.

Court Agrees Truck Subsidiary Is a Contract Carrier

The Supreme Court of the United States, in a *per curiam* decision, has upheld a finding of the Interstate Commerce Commission, and a like opinion of a three-judge district court, that a wholly-owned motor carrier subsidiary which renders transportation services for compensation to the parent company and to other companies controlled by the parent is under the requirements of the Interstate Commerce Act, a "contract," not a "private" carrier, and therefore must have an I. C. C. permit to operate. The case was *Schenley Distillers Corp. vs. U. S.*, the trucker subsidiary, Schenley Distilleries Motor Division, Inc., being considered the appellant on the ground that the parent corporation has no standing to sue, its only interest being that of a stockholder.

Schenley had contended, said the opinion, that the courts should disregard the separate corporate entities paying compensation to the trucker subsidiary and treat the corporations controlled by the parent as "one single commercial enterprise." But the court said that corporate entities "will not be disregarded where those in control have

deliberately adopted the corporate form in order to secure its advantages. . . . One who has created a corporate arrangement, chosen as a means of carrying out his business purposes, does not have the choice of disregarding the corporate entity in order to avoid the obligations which the statute lays upon it for the protection of the public."

Another question at issue was whether the proper method of presenting this case to the commission was by filing an application for a permit to operate along with a request that the application be dismissed as not required under the law. Again the court upheld the commission's view that such procedure is proper, and it likewise found no fault with the commission's denial of the application on the ground that no supporting evidence had been presented upon which a "contract carrier" permit could be granted.

Offers Broadened Permits to Truckers Serving Packers

While disclaiming authority to amend the permits involved on its own initiative, the Interstate Commerce Commission, Division 5, has at the same time offered to comply with written requests from the individual truckers and broaden operating authorities held by contract carriers serving meat-packing houses. The decision is in Ex Parte No. MC-38, the proceeding instituted upon a petition filed by the American Meat Institute, an association of meat-packing houses.

The commission offers to broaden the list of packing-house products which the contract carriers may transport, but rejects a proposal that blanket authority be likewise given for the transportation of equipment, materials, and supplies used in the conduct of the packing-house business. In the latter connection, the commission held that the carriers involved do not generally transport such supplies and equipment, so a particular carrier must support its claim in that field proof of "grandfather" rights or a showing of public convenience and necessity.

In supporting the Meat Institute's petition, the contract truckers stated that the lack of uniformity in commodity descriptions used in their permits had created a situation which required commission action to remove all doubt of the carriers' right to furnish the service which they have been rendering since prior to the "grandfather" date. The commission agreed, and offered to modify the permit of any packing-house-products carrier to authorize transportation of some 75 commodities classified in three general groups as follows: Meat, meat products and meat by-products; dairy products; and articles distributed by meat-packing houses.

The commission's disclaimer of authority to modify the permits on its own initiative came in its comment on a suggestion in the proposed report in the proceeding that such authority might be found in the Interstate Commerce Act's section 204(b) which authorizes the commission to classify groups of truckers "as the special nature of the services . . . shall require."

"This section of the act," the report said, "provides ample authority, we think,

to classify a group of carriers according to type of service rendered and to provide uniform commodity descriptions in the operating authorities issued to such carriers. . . . But, be that as it may, we find no authority in this section that empowers us in this proceeding to modify permits already issued. We may provide a uniform commodity description comprehending a special type of service for use in connection with permits to be issued in the future, but, in the absence of a specific request from the carrier, we may not amend permits already issued solely for reasons of classification."

U. P. Supervisors Brought Under Labor Act

With Commissioner Miller expressing the view that the orders involved should be "revised and made more restrictive," the Interstate Commerce Commission has amended and interpreted its outstanding orders defining the work of employees and subordinate officials to include the work of Union Pacific "roadmasters and supervisors such as general roadmasters, assistant roadmasters, and general foremen; supervisors of bridges and buildings such as supervisors, assistant supervisors, and general foremen; supervisors of water supply; supervisors and inspectors of signals such as supervisors, assistant supervisors, and general foremen; and supervisors of telegraph lines."

The decision, by Division 3 in Ex Parte No. 72 (Sub-No. 1), has the effect of bringing the employees involved under the provisions of the Railway Labor Act.

The determination was sought by the American Railway Supervisors Association, Inc., and the majority report represents the view of Commissioners Patterson and Barnard. It brought in all the employees involved by "interpreting" the outstanding orders as covering all except supervisors of telegraph lines and the various kinds of general foremen who were then reached through an amendment to the outstanding orders.

Commissioner Miller's separate views were outlined in a brief dissenting-in-part expression. He had "serious doubt" that the work of the supervisors involved was that of "employees or subordinate officials." He dissented from the majority report's finding which amends the outstanding orders to include the work performed by the supervisors of telegraph lines and general foremen, but he went along on other phases (except the inclusion of general roadmasters) because he thought that the findings were warranted by the outstanding orders being interpreted. As noted above, Mr. Miller would make those basic orders more restrictive.

The U. P. contended that the positions of the supervisors stamped them as officials, but the majority asserted that this contention was not borne out by the record. "The authority exercised by these men is very limited," it said. "For example, they cannot hire, discharge, discipline, or reinstate employees without obtaining proper authorization from some official of the carrier. . . . They do not get vacations . . . and they are not compensated when absent on personal business. . . . Although the general



Florists Honor Railroads for Their War Job

With an engraved certificate and floral tribute, the Society of American Florists paid their first of a series of industry awards of merit to the railroads "in recognition of outstanding and meritorious service as an industry during the period of World War II and its excellent program of reconversion for the peace." The award was presented to John J. Pelley, president of the Association of American Railroads, in Washington, D. C. by Granville Gude, president of the florists' association. From left to right: Mr. Pelley, Robert H. Roland, executive secretary of the florists, and Mr. Gude.

roadmasters and the others here considered have expense accounts . . . they are required to attach receipts to their accounts. . . . In carrying out their duties they perform manual labor, and much of the time wear overalls when so engaged. They handle their own correspondence and reports in longhand, and do not have private offices."

In its exceptions to the proposed report, the U. P. contended that some of the foregoing matters are "too trivial, intangible, and irrelevant to aid in a determination of the issues." To this the commission's report replies: "The line of demarkation between an official and a subordinate official has never been sharply drawn, and any fact that may help to a reasonable answer to the question presented should be given consideration although in and of itself it might be considered trivial, yet when all the facts are considered as a whole the answer may be reached whether or not the employee is a subordinate official."

Says Private Industry Should Move Oil in "Big Inch"

If the program recommended by the Surplus Property Administration is followed, the government-owned war emergency pipelines, and particularly the so-called Big Inch and Little Inch, will be turned over to private industry for operation if possible, and preference will be given to their continued use for transportation of petroleum, according to the report of Surplus Property Administrator Symington made public last week.

The railroads, through the Association of American Railroads, and the coal industry, including the miners' unions, have expressed vigorous opposition to proposals that these two large pipelines between the Southwest and the Atlantic coast be employed for the transmission of natural gas, and the S. P. A. program indicates that such use would be considered only after efforts to keep them in petroleum service have failed.

The chief recommendations in the S. P. A. report were as follows:

1. If the Big Inch and Little Big Inch cannot be disposed of for the movement of crude oil and petroleum products from the southwest to the east seaboard, they should be disposed of for service to interior points.

2. Disposal to private interests will be given preference.

3. All segments of the petroleum industry, particularly small independent operators, will be given the opportunity of acquiring the lines.

4. Should it prove impossible to sell the lines to the petroleum industry, consideration will be given to the possibilities of lease.

5. Public operation on a full cost basis may have to be considered if all efforts to dispose of the lines to private industry should fail.

6. Disposal for conversion to natural gas will be favored only if it proves impossible to keep the lines in petroleum service and the national security is otherwise adequately protected.

"Disposal to private interests will be given preference over any form of government financing, ownership, or control," the

report added. "Terms of sale must, however, include a provision that the properties are not to be resold, or basically altered in any way that would materially affect or destroy their military value. It must also be provided that the lines are to be operated as true common carriers of petroleum or its products at rates based on the cost of service plus a reasonable return on investment. Reasonable tariff requirements as to minimum tenders, originating and terminal storage, and other regulations affecting non-owning shippers must be assured."

Senate Subcommittee Receives Advice on Security Bill

Proposed amendments to the Railroad Retirement and Railroad Unemployment Insurance acts raise "fundamental" questions as to whether railroad employees should remain entirely outside the general federal social security system, and, if so, whether the liberalized set-up proposed by the Railway Labor Executives Association would be financially sound. So says a memorandum which Stephen E. Rice of the Senate's Office of Legislative Counsel has submitted to Senator Johnson, Democrat of Colorado, chairman of the interstate commerce subcommittee which is considering S 293, the pending Senate bill embodying the R. L. E. A. program.

"The first fundamental question," the memorandum says, "relates to the 10-year or more controversy as to whether the Federal Social Security Act should have universal coverage and other retirement acts . . . be supplemental thereto. The question of universal coverage under the Social Security Act is becoming more important each year that Congress freezes the payroll taxes at the one per cent figure, because so long as it stays at that figure the probability of contributions to the system by the government out of general revenues becomes more certain. If and when that occurs, railroad employees, . . . as well as others who are not now covered by that act, will be contributing to a system of social security from which they will receive no benefits."

Mr. Rice goes on to point out that the railway employees contend that this fundamental question was decided in 1935 and that there is no occasion for the committee to reexamine it. On the other hand, he added, the railroads "maintain that this is one of the fundamental underlying questions before the committee and that there should be a reasonable relationship between the benefits and taxes provided for by the railroad social security system and the benefits and taxes provided for by the general social security system and that the ultimate objective of our national policy should be reasonable equality of treatment for all workers with respect to social security."

Coming to the "fundamental question" of actuarial soundness which will arise "if the committee decides to continue the present system of railroad retirement and thereby centers its efforts on the changes in the bill," Mr. Rice noted that it is admitted "on all sides" that the present system is actuarially insolvent. He then went on to list conflicting contentions as to the proposed new set-up, which the railroads say

will be "more unsound," while Murray W. Latimer, chairman of the Railroad Retirement Board, justifies it on the basis of his expectations as to future national income and railroad payrolls "in the neighborhood of \$3.5 billion."

"The annual report of the Railroad Retirement Board for 1943," Mr. Rice continues, "shows that the covered payroll during the 20 years from 1925 to 1944 averaged \$2,638,000,000 per year. The same report shows that the director of research of the board has estimated an annual average payroll of \$2,290,000,000 in 1950 and thereafter. The actuarial advisory committee in 1943 assumed a future average payroll of \$2,500,000,000 per year. The varying elements that enter into the making of any actuarial estimate in connection with a plan of this magnitude are at best sometimes merely guesswork. However, the importance of the question is such that the most exhaustive study it is possible to make should be completed before a plan of this sort becomes law."

The remainder of the memorandum discusses the major provisions of the liberalizing program, adding that S. 293 includes also many "details and technicalities" which would undoubtedly raise "policy questions" if the subcommittee should decide to report a bill.

Loading Cars for a Shipper Is Transportation Service

Holding that the loading and unloading of freight cars constitute services performed "in connection with the transportation of . . . property by railroad," the Supreme Court of the United States has ruled that a railroad-affiliated warehouse company performing such work is an "employer" within the meaning of the Railroad Retirement Act of 1937 and the Railroad Unemployment Insurance Act of 1938, thus making its employees eligible for benefits under those statutes. The opinion by Justice Douglas, to which there were no dissents, was in the companion cases, *Railroad Retirement Board vs. Duquesne Warehouse Co.*, and *Duquesne Warehouse Co. vs. Railroad Retirement Board*, the Brotherhood of Railway Clerks in each case being allowed to intervene in support of the board.

The cases came to the Supreme Court after Duquesne, a wholly-owned subsidiary of the Pennsylvania Railroad, had sued in the district courts to compel the R. R. B. to set aside orders subjecting Duquesne to its authority under these statutes, the first-named case being based on the Retirement Act and the other on the Unemployment Insurance Act. In each case the district court judgment upheld Duquesne's contention that it was not an employer within the meaning of the statutes concerned, but the different appellate courts did not agree, the decision being for Duquesne in the first-named case but for the R. R. B. in the second.

The service performed by Duquesne was the loading and unloading of Pennsylvania cars at its warehouse when the shipments involved moved on tariffs requiring the owners of the freight to perform this service. It was Duquesne's practice to charge the owner for this service along with its charge for storage or other services, and

it therefore contended that the loading and unloading were done for its customers, and were not a part of railroad transportation since the Pennsylvania was forbidden from performing such service under the provisions of the applicable tariffs.

The basic question, however, according to Justice Douglas, "is not whether in these cases the service of loading and unloading is being rendered by the Pennsylvania and is, therefore, in fact a part of its transportation service. It is not whether the affiliate would itself be subject to the Interstate Commerce Act. It is whether a carrier's affiliate is performing a service that could be performed by the carrier and charged for under the line-haul tariffs. If it is such a service, it is a transportation service within the meaning of the present acts. . . . In other words, if a service is involved which the railroad could perform as a part of its transportation service, it is within the present acts. It then makes no difference that it is performed by a carrier affiliate rather than by the carrier itself." Duquesne is, therefore, the court concluded, an "employer" within the meaning of the statutes involved, as it is a company, controlled by a carrier, which performs a service "in connection with" the transportation of property by railroad, this being the language of the definition of "employer" in each act.

Time Runs Out in Interstate Stock Disposal Case

The December 31, 1945, deadline of the Interstate Commerce Commission's order requiring the United States Freight Corporation and Hickok Oil Corporation to divest themselves of all stock interest in the Interstate Motor Freight System passed with the respondents still unable to win commission approval of their proposals for compliance with the order. The divestment order grew out of the commission's investigation in No. MC-F-2181 and related proceedings (see *Railway Age* of June 24, 1944, page 1221).

Two days before the December 31 deadline the commission issued in the proceeding another order which denied a petition wherein respondents had asked that a proposal filed by them on December 3 be approved as "substantial compliance."

Water-Scoop Operation Leads to Derailment and Collision

As a result of its investigation, under the supervision of Commissioner Patterson, of a derailment and collision on the New York Central at 2:58 p. m. on November 16, 1945, the Interstate Commerce Commission has recommended that that road arrange water scoops on its locomotive tenders so they will be operated by a single valve, and that it install mechanism which will automatically raise and secure the water scoops in "upper position" (that is clear of the track and behind a protecting shield) when they leave the troughs from which engines take water while in motion.

The accident under investigation was that briefly described in *Railway Age* of November 24, 1945, in which the eastbound "Advance Commodore Vanderbilt" collided with a freight car obstructing the track after a westbound freight on the parallel track had been derailed. It occurred at a

point 9.62 miles west of South Bend, Ind., on the double-track main line between that point and Chicago. The passenger train, made up of locomotive and 15 cars, including 12 Pullman sleeping cars (6 of which were of lightweight steel construction) and 2 dining cars, was moving at 65 m.p.h. when it struck the derailed car, and the engine and first 10 cars were derailed, stopping in various positions south of or across the tracks. There were no fatalities, but 18 passengers and 21 employees were injured.

Train Stop in Use—In the vicinity of the accident the track is tangent and nearly level. Authorized speeds are 80 m.p.h. for passenger trains and 50 m.p.h. for freights. Trains are operated by signal indications and an automatic train stop system. At a point 1.08 miles east of the point of the accident are the west ends of water troughs located in both main tracks, which troughs extend 0.39 mile further east. Within the 1.08-mile interval west of the troughs are two highway grade crossings, each surfaced with 4 in. planks, and, on the westward track, at a point 199 ft. east of the point of collision, a facing point switch entering an auxiliary track to the north.

Each water trough is located in the center of the track, and is 23½ in. wide and 8¾ in. deep. The top of the trough is 1 in. below the top of the rails. A sloping apron arrangement and a trailer rail are located at the ends of the troughs for protection. Signals near the ends of the troughs indicate where water scoops should be lowered and raised.

The tender of the freight engine, No. 2858, is fitted with a water scoop, which includes a hinged dipper 8 in. by 13 in. in cross-section that is actuated by air pressure so it can be lowered into and raised from track troughs. The normal position of the bottom of the dipper when not in use is 5½ in. above the top of the rails, and when in position to scoop water it is 6¼ in. below the top of the rails. A coiled counter-balance spring, which is fully compressed when the dipper is lowered, is provided to insure rapid rising of the dipper, and holds it in retracted position when air has been released from the operating cylinder.

How Scoop Is Operated—Air is supplied to the operating mechanism through a ¾ in. pipe provided with a cut-out cock at the engineer's normal position. Another cut-out cock and the valve controlling the scoop are located on the left of the tender adjacent to the gangway, where the fireman stands to operate them. The instructions for operating the scoop require the engineer and fireman each to open the appropriate cut-out cock as the track trough is approached. When the engine reaches the proper signal the engineer by both oral and hand signals indicates that the fireman should place the valve in position to lower the dipper.

When the tender is filled, or the leaving signal is approached, the engineer again gives an oral and hand signal to the fireman, who then turns the operating valve lever to raise the dipper. The cut-out cocks are then closed about 15 sec. after the air stops exhausting from the valve. Normally the dipper raises from lower to retracted position in about 3 sec. after the operating

valve is turned. After the accident occurred, the mechanism involved was found to operate properly, and it had been tested before the freight left Elkhart, 24.71 miles east of the point of collision. It was found, however, that if one of the cut-out cocks was closed before the valve was set for the dipper to be raised, it would not complete the movement, but would come to a stop with the bottom surface about level with the top of the rails.

It was found that the dipper had not been fully retracted in this instance, as four planks from the highway crossings were driven into it, and other pieces of plank were found on the brake beams of the front truck of the tender. A protruding plank was found to have wedged open a switch point where the auxiliary track diverges from the westward main track, and the derailment of the freight resulted from that occurrence. The 24-car freight was moving about 38 m.p.h. at that time, and the rear truck of the tender and first 17 cars were derailed, with the ninth car fouling the eastward track. The fireman of the freight dropped a lighted fusee on the eastward track as soon as he observed the emergency brake application resulting from the derailment, according to the report, and he displayed another fusee from the left side of the cab. The eastbound passenger train was then only some 1,400 ft. distant, however, and was moving at 79 m.p.h. The engineer made an emergency brake application, and its speed was reduced to 65 m.p.h. when the locomotive struck the derailed freight car.

The use of three valves instead of one for operation of the water scoop was a contributing factor in this accident, the commission's report said. Both the engineer and fireman of the freight were familiar with the use of the water scoop. The fireman set the operating valve to raise the dipper when the cistern had filled and he thought an interval of 15 sec. passed before he closed the cut-out cock. The engineer closed the second cut-out after he thought he had heard the air exhaust from the valve.

Car Service Orders

The authority of Homer C. King, diversion agent for the Interstate Commerce Commission under its Revised Service Order No. 99, has been extended by the second revised version of that order, effective January 4 through April 30, to apply to all carload and less-than-carload freight and to empty freight cars. The order thus superseded had given him authority to re-route empty cars and carload traffic only, when in his opinion a route is open less congested than that designated by shipper or carrier.

The commission has issued Second Revised Service Order No. 371, effective January 5 through June 30, unless otherwise directed, modifying the restriction on furnishing box cars suitable for flour or sugar loading for the purpose of loading ammunition. The prohibition formerly applied to ports on both the Atlantic and Pacific coasts, but its effect now has been limited to Pacific coast ports.

Revised service orders have been issued modifying embargoes on outbound l.c.l. freight at midwestern points where con-

gestion at freight houses has resulted from the continuance of strikes affecting truckers' operations.

No. 419, applying at Sioux City, Iowa, and South Sioux City, Nebr., was revised to affect the Chicago, Burlington & Quincy, Chicago & North Western, Chicago, St. Paul, Minneapolis & Omaha, and Great Northern only for the period January 9 to January 19 inclusive. By amendment No. 11 to Service Order 68, the commission has postponed from January 31 to June 30 the expiration date of that order, which suspends Rule 24 of the Consolidated Freight Classification and those provisions of Rule 34 and other tariffs that permitted the application of minimum weights lower than those provided for cars used. Also, it prohibits the furnishing of two smaller cars in lieu of a larger car ordered.

I. C. C. Condemns Rates Based on Aggregates of Tonnage

Adopting the recommendations of Examiner T. Leo Haden's proposed report, the Interstate Commerce Commission, Division 2, has condemned forwarder rates conditioned upon aggregates of tonnage. The report is in the No. 28896 investigation instituted by the commission upon its own motion.

At issue were certain rates published by C. E. Anderson, doing business as the Western Freight Association, based upon the aggregate amount of tonnage furnished during the 12 months beginning August 1 of each year. The commission found that there was no difference in principle between the rates under consideration and other volume rates which it had found unlawful in previous decisions.

After making this adverse finding, the report went on to suggest also that the rates would be in violation of the Elkins Act, and that they would involve unduly preferential extensions of credit to shippers in a position to use them.

Equipment and Supplies

FREIGHT CARS

The PITTSBURGH & WEST VIRGINIA has ordered 100 50-ton 40½-ft. steel sheathed box cars from the American Car & Foundry Co.

PASSENGER CARS

B. & O. Orders Two Streamliners

The Baltimore & Ohio has placed an order with the Pullman-Standard Car Manufacturing Company for two streamlined lightweight all-coach trains of eight cars each for daytime service between Baltimore, Md., Washington, D. C., Pittsburgh, Pa., and Chicago. From head end to rear, each train will consist of a buffet-lounge car, four coaches, a coach with a "dome" observation section, a dining car and an observation car. The buffet-lounge car will serve light refreshments, and will contain a dormitory to accommodate the dining car crew, and a large compartment for the storage of baggage.

Each of the four coaches will accommo-

date 52 passengers in reclining seats. The women's retiring room at one end of the car will contain a smoking section with movable lounge chairs, three wash stands and two toilet rooms. Similar accommodations for men will be placed at the other end of the car. The "dome" coach will be of the two-level type with reclining coach seats on the standard level and 24 lounge chairs in the upper level "dome" section. Wide, curved windows, of heat and ray resisting construction, in the "dome" will provide unobstructed vision for passengers.

The seating arrangement in the dining car will permit each passenger at a four-seat table to have full use of one side of the table, this arrangement also facilitating the seating of passengers and service by the waiters.

The observation car will consist of two sections, separated by a semi-circular bar. The forward section will be a tavern lounge while the observation end will be furnished with comfortable chairs and settees.

Mechanical features of the train will include roller bearings, pneumatic and electric brakes, tight-lock couplers to promote smooth starting and stopping, and electric refrigeration throughout for drinking fountains, buffets and dining car. Radio and public address facilities will permit broadcasts being heard in all cars. The trains will be painted blue and grey to conform with the standard color combination of the B. & O.'s streamliners. The crew will include a stewardess, a special room being provided in the observation car as her headquarters.

The B. & O. previously had ordered from Pullman-Standard, eight 16-duplex roomette 4-double bedroom sleepers and seven 10-roomette 5-double bedroom sleepers for its night trains.

SIGNALING

The CHICAGO & EASTERN ILLINOIS has placed orders with the Union Switch & Signal Co., covering the materials required for the installation of centralized traffic control on the 123-mile single track territory from Clinton, Ind., south to Evansville. The 10-ft. Type C control machine will be located at Danville, Ill., 40 miles north of Clinton. The controlled territory will be divided into two sections, each section being handled by coded carrier control over two code wires extending through the entire 163-mile territory, with this coded carrier feature providing simultaneous and independent controls or indications to both sections. The orders include color-light signals, Style M-22B low-voltage dual-control electric switch layouts for the 31 controlled ends of sidings, 63 type SL-6A electric switch locks for the hand-thrown main line switches, and coding equipment, relays, rectifiers, transformers and housings.

Construction

CHICAGO, BURLINGTON & QUINCY.—This company has been authorized by Division 4 of the Interstate Commerce Commission to build a 2,400-ft. connecting track near Talmage, Iowa, joining its main line with that of the Chicago Great Western. The total estimated cost, \$50,858, includes \$4,508 for signals and interlockers, \$2,006 for rail, and \$5,386 for track material.

Supply Trade

R. C. Schrenk, of the sales department of the Scullin Steel Company, resigned effective December 31, 1945.

C. H. Wagner, Jr., secretary of the Parker Appliance Company, has been elected vice-president of the company.

Frank H. Janke, assistant to the president of the American Brake Shoe Company, retired from active service on January 1.

William D. Truesdale, vice-president in charge of finance of the Inland Steel Company, has retired after 38 years of service.

United Aircraft Products, Inc., has announced its entry into the hydraulic jack field, covering every phase from automotive and utility jacks to aviation, railroad and industrial jacks.

George H. Case, assistant treasurer of the Pullman-Standard Car Manufacturing Company, with headquarters at Chicago, has retired after 55 years of service with the Pullman group of companies.

C. Q. Wright has returned to the Whiting Corporation, Harvey, Ill., as vice-president dealing with special staff work. Mr. Wright served as a submarine commander with the rank of captain during the war.

Bruce A. Royer has joined the general sales staff of the Caterpillar Tractor Company and has been temporarily assigned to the Sales Training division. He was formerly field engineer and director of market research of R. G. LeTourneau, Inc.

Fred E. Dayes has been appointed vice-president in charge of intercity sales of the ACF-Brill Motors Company, with headquarters at Chicago, succeeding to the duties of Arthur P. Jenks, Chicago district sales manager who has retired. Richard D. Parsons will continue as assistant district manager at Chicago.

The Philco Corporation has changed the name of the Philco Radio & Television Corp., a wholly-owned subsidiary which handles the national distribution of Philco products in the United States, to Philco Products, Inc.

In viewing the prospects for 1946, the 80th anniversary of the H. K. Porter Company, Inc., T. M. Evans, president, stated that capacity operation for all divisions of the company seems reasonably assured in the new year. It is estimated that gross sales should be in the neighborhood of the war-time peak of approximately \$30,000,000.

The Laclede-Christy Clay Products Company, St. Louis, Mo., has purchased the properties and business of the Alabama Clay Products Company, Birmingham, Ala., which it will operate as a wholly-owned subsidiary. A. S. Holberg, president of the Alabama Clay Products Company, will continue with the company and H. W. Gethin, manager of the Pitts-

burgh, Pa., district of Laclede-Christy has been appointed vice-president and general manager of the newly-acquired properties. The main office of Alabama Clay Products will continue to be located in Birmingham, Ala.

LeRoy Kramer, first vice-president of the **General American Transportation Corporation**, and an officer of that company for over 20 years, retired January 1. He will continue in an advisory capacity as vice-president—retired, and will keep his office at the company's headquarters in Chicago.

Mr. Kramer first studied law and was admitted to practice at the bar. He later joined the operating department of the St. Louis-San Francisco, advancing to the position of assistant to the vice-president, and in 1910 joined the Rock Island in a similar capacity. Two years later he was appointed assistant to the president of the Pullman Company and, in 1915, vice-president in charge of all shops of that company. When the government took over the railroads during the first World War, he was drafted as federal manager of the St. Louis-San Francisco and of the Missouri-Kansas-Texas railroads at St. Louis, Mo. At the

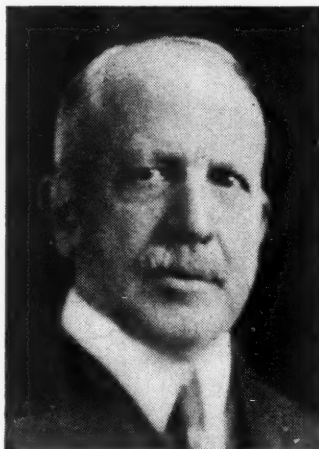


LeRoy Kramer

end of the war, he joined the Willys-Overland Company as vice-president in charge of production at Toledo, Ohio, remaining there until 1922. He then returned to Chicago as vice-president of T. H. Symington & Co. Early in 1925, he was appointed vice-president in charge of manufacturing and sales of railway cars of the General American Transportation Corporation. As General American enlarged its scope, he was appointed an officer and director of its various subsidiaries, including the General American Aerocoach Company, of which he was president.

Harry Miller Pflager, senior vice-president of the **General Steel Castings Corporation**, retired on January 1 after more than 41 years of service. He will continue as a director. Mr. Pflager was educated at Washington University. He began his business career with the Pullman Company and remained with that company until 1901 in positions from draftsman to mechanical superintendent. He was vice-president and general manager of the American Clock Company from 1901 to 1903 and served for one year as assistant vice-president of American Steel

Foundries. In 1904 he became associated, as senior vice-president and director, with Clarence H. Howard in the founding of the Commonwealth Steel Company. He



Harry Miller Pflager

has continued in the same capacity with the Commonwealth Steel Company and its successor, the General Steel Castings Corporation, up to the present time.

Mr. Pflager has been a leader in the designing and development of one-piece cast steel devices for railway equipment—his patents being on four-wheel and six-wheel passenger car trucks with the truck frames cast in one piece, the cast steel waterbottom tenderframe with the bottom of the tender tank an integral part of the casting, and other Commonwealth products. He was also responsible for the development of the cast-steel one-piece bed for steam locomotives. For this latter development, he was awarded the George R. Henderson medal by the Franklin Institute in 1943. At the beginning of World War II, he assisted in the development of cast armor one-piece top hulls for combat tanks.

Fitzwilliam Sargent, formerly eastern railway sales manager, has been appointed railway sales manager for the **Edward G. Budd Manufacturing Company**, with headquarters in Philadelphia, Pa., and New



Fitzwilliam Sargent

York. Mr. Sargent was graduated from Harvard University in 1914. He served in the first World War as a lieutenant, j.g., in naval aviation. He began his business

career with the Standard Supply Equipment Company and joined the Budd Company in 1940 in the sales department of the railway sales division. He was appointed eastern sales manager in May, 1945.

Alfred E. Calkins has been elected president and a director of the **John W. Miller Company** of New York to succeed **John W. Miller**, who has retired from active management of the company. Mr. Miller was elected executive vice-president and will continue as treasurer. Mr. Calkins joined the John W. Miller Company as vice-president in 1943 after 52 years of service in the mechanical department of the New York Central and finally as superintendent of equipment.

Herbert J. Rosen, whose election to executive vice-president of the **Griffin Wheel Company**, with headquarters at Chicago, was reported in the *Railway Age* of December 22, was born at Brooklyn, N. Y., on February 12, 1885, and his entire business career has been spent with the Griffin organization with which he started on July 2, 1900, as a clerk of the plant office at Denver, Colo. After holding vari-



Herbert J. Rosen

ous office positions, he served as cashier at Chicago, Detroit, Mich., and Denver, during the period from 1906 to 1914. In the latter year he was made assistant to the chief engineer, and in 1918 was appointed assistant superintendent of the order division. Later that year Mr. Rosen was made sales agent at Denver, which position he held until 1930 when he was promoted to assistant to the vice-president. In 1934 he was made operating manager, and in January, 1944, he was elected vice-president, the position he held at the time of his new promotion.

John A. Schoch has been appointed manager of the transportation sales department of the **Westinghouse Electric Corporation**, East Pittsburgh, Pa. Mr. Schoch, who will be located in the East Pittsburgh Works, succeeds **H. H. Chapman**, who has been transferred to the northwestern district. Mr. Schoch was graduated from Illinois University with a degree in electrical engineering in 1917. He enrolled in the Westinghouse graduate student training course and was assigned to the transportation section of the general

engineering department, later being transferred to the railway engineering department, where he specialized in transportation engineering. In 1943 he served as consultant with the transportation equipment division of the War Production Board in Washington, D. C., returning to Westinghouse as manager of the heavy traction section of the transportation and generator sales department, and later as assistant manager of that department, until his present appointment.

W. Lyle Richardson, Frederick H. Norton and Philip A. Hollar have been elected vice-presidents of the sales staff of the **American Car & Foundry Co.** to assist R. A. Williams, vice-president in



W. Lyle Richardson

charge of sales. Mr. Richardson, formerly an assistant vice-president, has been with the company for twenty years. He attended Tulane University and Yale University and was graduated from the Sheffield Scientific School in 1924. Aside from two years training in shop practice at the company's Berwick, Pa., plant, he has served continuously with the sales division and in March, 1944, was appointed an assistant vice-president in the New York sales department.



Frederick H. Norton

Mr. Norton joined the American Car & Foundry Co. in April, 1945, as an assistant vice-president in the sales department. He was graduated from Purdue University with a degree in mechanical en-

gineering in 1932. He served his apprenticeship with the American Steel Foundries, following which he was assigned to that company's Chicago office as sales engineer. In 1940 he was transferred to Washington, D. C., to open a new office for



Philip A. Hollar

the handling of the American Steel Foundries' activities with the government and foreign agencies.

Mr. Hollar studied at the Carnegie Institute of Technology and subsequently received a degree in mechanical engineering from Purdue University in 1925. While attending college he worked during vacation periods in the Altoona, Pa., shops of the Pennsylvania. From 1919 to 1941 he served with the Pennsylvania in various capacities, first as special apprentice and later as motive power inspector at the Altoona shops; and as fuel purchasing agent and assistant stores manager at Philadelphia, Pa. From 1942 to 1945 he was special representative and assistant to the vice-president, operations and maintenance department, for the Association of American Railroads at Washington.

The **Hunt-Spiller Manufacturing Corporation**, of Boston, Mass., has concluded an arrangement with the **Double Seal Ring Company**, of Ft. Worth, Texas, Los Angeles, Calif., and New York, whereby Hunt-Spiller becomes the exclusive sales agents for Double Seal type rings for Diesel locomotives, steam locomotive auxiliaries, etc. Under the arrangement, Hunt-Spiller air furnace gun iron will be used exclusively in the Double Seal type ring.

Edwin B. Meissner, Jr., whose recent election to vice-president of the **St. Louis Car Company**, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of December 29, was born at St. Louis on December 27, 1918, and received his higher education at the University of Pennsylvania. He began his business career with the St. Louis Car Company in 1935, serving in various capacities during his college vacation periods until graduating in 1940 when he joined the company on a permanent basis as assistant to the president. In February, 1941, Mr. Meissner entered the armed forces to serve with the 35th Infantry division at Camp Robinson, Ark., later attending the

Infantry Officers' Candidate School at Ft. Benning, Ga. In July, 1943, he joined the 13th Airborne division, subsequently serving as an inspector general of the division in the European theater. He returned to the St. Louis Car Company last December, at which time he was elected to his new position.

Arthur H. Smith has been appointed railroad sales manager of the **Kerite Company**. Mr. Smith began his career in 1912 with the Railroad Supply Company and in 1930 was appointed vice-president of the Railroad Material Company, an outgrowth of the former. He was eastern



Arthur H. Smith

railroad sales manager for the Youngstown Sheet & Tube Co. in 1932 and joined the Kerite Company in 1933. During the first World War he served as a lieutenant in the air corps and in World War II in the U. S. Coast Guard Reserve as a flotilla commander.

W. J. Woodward has retired as director and treasurer of the General American Transportation Corporation after 33 years of service and **Edward E. Schulz**, who has been with the company for 26 years, has been appointed treasurer and assistant secretary. **H. E. Coyl** and **W. J. Stebler**, vice-presidents, have been elected to the board of directors.

Sidney G. Down, first vice-president, **Samuel C. McConahey**, vice-president and treasurer, and **John B. Wright**, assistant to the president, of the **Westinghouse Air Brake Company**, Wilmerding, Pa.; and **William H. Cadwallader**, vice-president of the **Union Switch & Signal Co.**, Swissvale, Pa., Westinghouse Air Brake subsidiary, retired on January 1. Mr. Down's retirement and career were reported in the *Railway Age* of January 5, page 128.

Mr. McConahey joined the Westinghouse Air Brake Company in 1899 as a stenographer for H. H. Westinghouse. He was appointed chief clerk in the commercial department in 1905 and promoted to assistant secretary of the company in 1906. He was appointed acting vice-president in 1914, and was elected treasurer in 1918. He was elected to the position of vice-president and treasurer in 1937, and a director of the Canadian Westinghouse Company and of the Westinghouse Air Brake

Company in 1940. He also is a director, vice-president and treasurer of the Westhouse Friction Draft Gear Company; director, vice-president and treasurer of the American Brake Company; director, vice-president and treasurer of the National Brake & Electric Co.; director and vice-president and treasurer of the Westinghouse Pacific Coast Brake Company, and a director of the Union Switch & Signal Co.

Mr. Wright began his career with Westinghouse Air Brake in 1899 as a stenographer and clerk in the engineering department. He was appointed assistant to the vice-president in 1917 and two years later assistant manager of the southeastern district, with headquarters in Pittsburgh, Pa. He was appointed assistant vice-president and manager of the Pittsburgh district in 1932 and assistant to the president in 1940, while retaining the position of Pittsburgh district manager. He is president of the Railway Club of Pittsburgh.

Mr. Cadwallader became a blueprint boy at the Union Switch & Signal Co. in 1891. Three years later he was promoted to clerk and served in various departments until 1911, when he was appointed acting assistant general manager. He was appointed assistant general manager in 1912, and general manager in 1914. A year later he was appointed assistant general sales manager, serving in that capacity until 1923, when he was appointed assistant to the vice-president. He was elected vice-president in 1929. Since 1936, he has served the company as vice-president and, until a few months ago, also as general manager. Mr. Cadwallader is a director of the Westinghouse Air Brake Company, the Union Switch & Signal Co. and the American Brake Company. He is a member of the Pittsburgh Chamber of Commerce, and is the company's representative member of the United States Chamber of Commerce and the Pennsylvania State Chamber of Commerce. He also is a member of the Army Ordnance Association, Pittsburgh post; signal section of the Association of American Railroads; the Railway Business Association; the Railway Club of Pittsburgh and the Tristate Industrial Association.

OBITUARY

George W. Cox, superintendent of industrial relations for the North Chicago plant of the American Steel & Wire Co., died in a Waukegan (Ill.) hospital on January 7 from injuries suffered in an automobile accident on January 5.

Charles C. Hall, vice-president and general manager of the Durametallic Corporation, Kalamazoo, Mich., died at his home in that city on December 26. Mr. Hall, founder of the company with which he was affiliated, was born in 1875 and was an authority on the manufacture of flexible metallic packings and rotary mechanical sealing devices. He spent more than 25 years of his business career in designing and fabricating sealing products. Under his leadership the Durametallic organization grew from a small business to a corporation owning and operating a large

plant, with branch offices and field engineers covering the entire United States.

Eugene C. Argust, vice-president and secretary of the Morden Frog & Crossing Works, whose death on December 19 was reported in the *Railway Age* of December 29, was born at St. Louis, Mo., on June 29, 1883, and received his higher education at Washington University, St. Louis. He began his business career in 1901 as a draftsman of the Elliot Frog & Switch Co., East St. Louis, Mo., and five years later went with the St. Louis Frog & Switch Co. as chief engineer. Subsequently he was advanced to secretary and treasurer. In 1933 Mr. Argust was appointed assistant to the president of the Morden organization, with headquarters at Chicago, and on March 3, 1936, he was elected to the position he held at the time of his death.

Financial

ABERDEEN & ROCKFISH.—*Note.*—Division 4 of the Interstate Commerce Commission has authorized this road to issue a \$50,000 1-year renewable 3 per cent note in connection with a bank loan of that amount from the Security National Bank of Greensboro, Raleigh, N. C., the proceeds of which are to be used for betterments.

CHICAGO, BURLINGTON & QUINCY.—*Trackage Rights.*—Division 4 of the Interstate Commerce Commission has authorized this company to operate under trackage rights on the main line of the Chicago Great Western from Burch, Iowa, to Afton Junction, about 51 miles, in lieu of its own branch from Burch to Osceola, which the division, with Commissioner Porter dissenting, has authorized it to abandon.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—*Equity Holders' Plea Denied.*—A group of preferred stockholders in the recently-reorganized Chicago, Milwaukee, St. Paul & Pacific who sought to delay the reorganization of the road were defeated at Chicago when United States District Judge Michael L. Igoe denied a motion asking the court to retain control of the properties. The motion was made by Attorney Henry Kohn on behalf of holders of 75,000 shares of stock. As reported in the *Railway Age* of December 15, Judge Igoe on December 1 turned the road's properties over to five voting trustees representing investment groups, and at the same time Leo T. Crowley and H. A. Scandrett were elected chairman of the board and president respectively. After declaring that the Milwaukee has made an average of \$2,500,000 over and above fixed charges during the past seven years, Mr. Kohn based his plea for the court to retain the railroad properties under its jurisdiction on the grounds that there is pending in Congress the Chauncey W. Reed bill which, according to Mr. Kohn, would assign to stockholders an equity in a reorganized railroad which would entitle them to participate in improved earnings, provided the railway had earned more than its fixed

charges for a period of seven years. In denying the motion of the stockholders, Judge Igoe pointed out that there was no point to delaying the reorganization plan details which, at this point, are more than half completed.

DELAWARE & HUDSON.—*Refunding Abandoned.*—Division 4 of the Interstate Commerce Commission has dismissed, at the request of this corporation and the Delaware & Hudson Company, their respective applications for authority to issue, and to assume liability for, \$50,000,000 of series A first and refunding mortgage bonds due in 1980, the proceeds of which were to have been employed in the retirement of other obligations, as described in *Railway Age* of June 30, 1945, page 1165. Withdrawal of the applications followed failure to obtain tenders for the new issue when offered at competitive bidding, as noted in this column in the issue of July 21, 1945, page 121.

MISSOURI-KANSAS-TEXAS.—*Bank Loan.*—Division 4 of the Interstate Commerce Commission has authorized this company to pledge for not more than 2 years \$13,152,600 of its series E prior lien mortgage 5 per cent bonds as collateral security for \$5,000,000 of 13½ per cent notes for which the Central Hanover Bank & Trust Company will advance a bank loan of that amount, which funds are to be used to purchase the company's first mortgage bonds or prior lien mortgage bonds. As a result of retirement of fixed-interest obligations through purchases and miscellaneous debt reductions, the company's annual fixed interest charges have been reduced in three years from \$4,335,066 to \$2,346,288, the division's report pointed out.

ST. JOHNSBURY & LAKE CHAMPLAIN.—*Reorganization Plan Approved.*—Division 4 of the Interstate Commerce Commission has approved a plan for this road's reorganization under the provisions of section 77 of the Bankruptcy Act, establishing its new capitalization at \$1,300,000 and its annual fixed and contingent charges at \$41,500, as compared to the old company's \$7,026,424 capitalization and \$123,475 annual fixed charges. The equities of holders of general claims, unsecured notes, open account and both classes of stock were held to be of no value, and no provision has been made for their participation in the reorganization.

The Boston & Maine, as holder of the old company's first mortgage bonds, which it acquired as guarantor by payment when due, will receive all of the reorganized company's securities, but its acquisition of control of the property is subject to subsequent authorization. This allocation of securities represents about 40 per cent of the claim evidenced by the first mortgage bonds, and no provision is made in respect of the B. & M.'s claims evidenced by notes and open accounts aggregating \$3,126,835. In addition to \$2,452,449 of common stock and \$1,154,400 of preferred stock, the old company's capitalization included notes in the amount of \$149,980 to the state of Vermont and of \$30,101 to the Maine Central, plus the amounts represented by securities and open accounts held by the B. & M.

The plan provides a new capitalization made up of \$400,000 of 4 per cent series A

first mortgage bonds, due in 1975; \$300,000 of 4½ per cent second mortgage income bonds, due in 1995; and \$600,000 of common stock. Annual charges thereon would consist of \$16,000 fixed interest on first mortgage bonds; \$9,000 for sinking fund for that issue; \$13,500 contingent interest on income bonds; and a \$3,000 contingent charge for sinking fund for that issue. The effective date of the reorganization is July 1, 1945, and the B. & M. is authorized to appoint the one reorganization manager, who is to determine whether the old company is to reacquire the property under an amended charter or a new company is to be organized. The division found that the property is not in need of extensive rehabilitation, although it is desirable that a reasonable amount of rail and ballast be replaced and some of the equipment is not in good condition. That part of the St. Johnsbury's line from St. Johnsbury, Vt., to Lunenburg, 22.1 miles, is leased to the Canadian Pacific, along with 23 miles of other track, and sub-leased by that company to the Maine Central. The present rental of \$25,000 annually will be pledged as additional security for the new first mortgage bonds, and is sufficient to meet interest and sinking fund charges thereon.

SARATOGA & SCHUYLERVILLE. — *Acquisition.*—Division 4 of the Interstate Commerce Commission has approved arrangements whereby this new company will purchase from the Boston & Maine, at a price of \$25,500, a line from Stillwater, N. Y., to Saratoga, 16.9 miles, together with a branch from Schuyler Junction to Schuylerville, 8.2 miles. The Saratoga has been authorized to issue \$100,000 of capital stock, sold at par to S. M. Pinsly, who has been authorized to control the road in addition to the Hoosac Tunnel & Wilmington. In addition to financing the acquisition of the line and supplying working capital, funds so obtained will be used for the acquisition of certain equipment. While the Boston & Maine has entered into an agreement with the Railway Labor Executives Association for the protection of any of its employees who may be adversely affected by the sale, on substantially the terms prescribed by the commission in the Burlington abandonment case, the division has reserved jurisdiction for a 4-year period with respect to prescribing such terms for affected employees not covered by this agreement, if any.

Average Prices Stocks and Bonds

| | Jan. 8 | Last week | Last year |
|---|--------|-----------|-----------|
| Average price of 20 representative railway stocks.. | 63.03 | 61.03 | 50.56 |
| Average price of 20 representative railway bonds.. | 101.41 | 100.67 | 94.49 |

Dividends Declared

Belt Railroad & Stockyards. — Common, quarterly, 50¢; and 6% preferred, quarterly, both payable January 2 to holders of record December 31, 1945.
 Carolina, Clinchfield & Ohio. — Quarterly, \$1.25, payable January 21 to holders of record January 10.
 Maine Central. — Prior preferred, quarterly, \$1.50, payable January 2 to holders of record December 24, 1945.
 Northern Pacific. — \$1.00, payable February 1 to holders of record January 8.
 Piedmont & Northern. — Year-end, \$1.50, payable January 21 to holders of record January 5.
 Stony Brook. — Semi-annually, \$2.50, payable January 5 to holders of record December 31, 1945.

Abandonments

ATCHISON, TOPEKA & SANTA FE.—Division 4 of the Interstate Commerce Commission has authorized this company to abandon a line from Olinda, Cal., to Atwood, 3.67 miles, on which train service was discontinued in 1938 after severe damage by storm was experienced.

CHICAGO, BURLINGTON & QUINCY.—With Commissioner Porter dissenting, Division 4 of the Interstate Commerce Commission has issued a report and order authorizing this company to abandon a branch from Burch, Iowa, to Osceola, 53.15 miles, upon institution of alternate service by trackage rights on a Chicago Great Western line which is substantially parallel to it. The abandonment was opposed by the Iowa State Commerce Commission and local interests, and a proposed report by Examiner J. S. Pritchard recommended denial of the application at least until more satisfactory trucking service in the affected area could be developed. (Previous item in *Railway Age* of June 9, 1945, page 1036.)

The Burlington contended that operation over the C. G. W. would enable it to give better service at lower cost, so far as bridge traffic is concerned, and that local traffic has been insufficient to justify operation of the branch. Protestants asserted that highways in the area served by the branch are not suitable for truck operation, that new trucks are not available, and that abandonment of the line would result in lowered land values and higher taxes and injury to various shippers and business interests. Such considerations are not controlling in the determination of a question of convenience and necessity, however, the majority of the division held, while the National Transportation Policy requires regulation of transportation to promote sound economic conditions among the carriers consistent with efficient and economical service, a requirement the majority said was met by the arrangement here proposed.

Dissenting from the views of Commissioners Mahaffie and Miller, Commissioner Porter observed that "it is plain that this abandonment will have a very injurious effect upon the communities affected." The criterion, he said, should be whether the injury to the territory would, from the standpoint of the public interest, outweigh the benefits the carrier would enjoy. In his opinion, abandonment at this time is not justified by that test, though he would not deny the road an opportunity to renew its application "at a time when trucking facilities have become adequate to meet the reasonable needs of the communities affected."

Approval of the application was subject to certain prescribed conditions for the protection of any employees adversely affected by the abandonment, these being terms agreed to by the Burlington and the Railway Labor Executives Association, the general effect of which is similar to that of the conditions prescribed in the basic case, also involving a Burlington abandonment, as set forth in 257 I.C.C. 700.

Railway Officers

EXECUTIVE

L. W. Horning, vice-president of the New York Central at New York, has been assigned jurisdiction over public relations in addition to personnel.

Edward P. Vernia, vice-president-traffic of the Chicago, Indianapolis & Louisville, with headquarters at Chicago, has retired after more than 53 years of service.

William Manson, general manager of western lines of the Canadian Pacific, with headquarters at Winnipeg, Man., has been elected vice-president in charge of personnel, with headquarters at Montreal, Que. Mr. Manson was born at Shoal Lake, Man., on August 28, 1892, and entered railway service in October, 1909, as a car service department clerk of the Canadian Pacific at Winnipeg. He held a number of minor positions until January 1, 1922, when he was advanced to supervisor of



William Manson

weighing and refrigeration, with the same headquarters. In September, 1926, he was appointed trainmaster at Weyburn, Sask., and two years later he was promoted to assistant superintendent, with headquarters at Lethbridge, Alta. He was subsequently transferred to Calgary, Alta., and the Winnipeg Terminals, being advanced to superintendent, with headquarters at Nelson, B. C., in April, 1934. He served in this capacity at various points of the road before being promoted to the position he held at the time of his new appointment.

Robert J. Marony, whose appointment as vice-president of the Chicago, Milwaukee, St. Paul & Pacific was announced in the December 8 issue of *Railway Age*, was born in Philadelphia, Pa., on February 9, 1881, and attended the College of the City of New York. He began his railway career as a clerk in the financial offices of the Chicago, Milwaukee, St. Paul & Pacific at New York. He has held various positions in financial offices there, becoming assistant secretary and assistant treasurer in 1912, and also vice-

president in 1921. In 1925, Mr. Marony was appointed New York financial representative for the receivers, Chicago, Milwaukee & St. Paul. He became vice-president and assistant secretary of the Chicago, Milwaukee, St. Paul & Pacific in 1928, then New York fiscal representative for trustees in 1935. With his recent appointment as vice-president, Mr. Marony will continue to serve as fiscal representative.

FINANCIAL, LEGAL AND ACCOUNTING

John Jesse, tax investigator for the Canadian Nationals at Montreal, Que., has retired after nearly 50 years' railroad service.

W. E. Grossen has been appointed auditor of the Nevada Northern, with headquarters at East Ely, Nev., succeeding **Frank Roper**, who has retired.

George W. Bramfeld, assistant general accountant of the Illinois Central at Chicago, has been promoted to general accountant, with the same headquarters.

R. T. Cubbage, contract attorney of the Chicago, Burlington & Quincy at Chicago, has been appointed to assistant to general counsel, with the same headquarters.

John I. Barnes, assistant to the comptroller of the Baltimore & Ohio at Baltimore, Md., has been appointed assistant comptroller, succeeding **Frank A. Deverell**, who has retired after 53 years in railroading.

E. V. Ashworth, assistant auditor-revenues of the St. Louis-San Francisco at St. Louis, Mo., has been promoted to auditor-revenues, with the same headquarters, succeeding **E. R. O. Mueller**, who has retired after 51 years of service with the Frisco.

Paul S. Young, whose appointment as real estate and tax agent of the Bessemer & Lake Erie at Pittsburgh, Pa., was announced in the December 15 issue of *Railway Age*, was born on February 3, 1912,



Paul S. Young

at Oil City, Pa. He was graduated from Pennsylvania State College in 1934 with a degree of Bachelor of Science in Electrical Engineering. Mr. Young entered railroad service in 1935 as telegraph and

signal apprentice for the Pennsylvania. He joined the Bessemer & Lake Erie in 1936 as an investigator at Pittsburgh. He became assistant land agent there in 1940, which post he maintained until his recent advancement on December 1, 1945.

William J. Quinn, recently released from service with the Federal Bureau of Investigation, has returned to his position as commerce counsel of the Minneapolis, St. Paul & Sault Ste. Marie, with headquarters at Minneapolis, Minn., succeeding **A. H. Lossow**, who has been assigned to other duties until his retirement on April 1.

A. O. Appel, deputy assistant treasurer of the Atchison, Topeka & Santa Fe at Los Angeles, Cal., has been promoted to assistant secretary and treasurer, with the same headquarters, succeeding **C. W. Jones**, who has retired after 55 years of railroad service. **G. L. Garver**, chief clerk in the president's office at Chicago, has been promoted to deputy assistant treasurer at Los Angeles, where he replaces Mr. Appel.

OPERATING

J. G. Woodall has been appointed trainmaster of the Southern, with headquarters at Hattiesburg, Miss.

W. E. Carter, terminal trainmaster for the Virginian at Sewalls Point, Va., has been appointed Norfolk division trainmaster there. The position of terminal trainmaster has been abolished.

R. D. Fretwell has been appointed superintendent of the Northern division of the Kansas City Southern, with headquarters at Pittsburg, Kan., succeeding **C. M. Martin**, who has been assigned to other duties.

K. K. Stokes, who has been acting as superintendent of transportation of the Chicago, Rock Island & Pacific since the death of **J. R. Pickering** in May, 1943, has been promoted to general superintendent of transportation, with headquarters as before at Chicago.

R. E. Mattson, who has been on leave of absence to serve in the armed forces, has returned to the Northern Pacific as assistant general superintendent of transportation, with headquarters at St. Paul, Minn. Previous to joining the armed forces, he was assistant superintendent of the Idaho division.

R. R. Sutter, superintendent of the Milwaukee-Kansas City Southern joint agency at Kansas City, Mo., has been promoted to superintendent of transportation of the Kansas City Southern, with headquarters at Shreveport, La., succeeding **J. T. McCorkle**, who has been appointed general superintendent of the joint agency at Kansas City.

W. J. Hotchkiss, recently released from service with the armed forces, who before he entered the army was division superintendent of the Chicago, Milwaukee, St. Paul & Pacific at Aberdeen, S. D., has been appointed superintendent of the Kansas City division, with headquarters at Ottumwa, Iowa. **E. O. Eckert**, who has

been acting superintendent at Ottumwa, has been promoted superintendent of the Kansas City Joint Agency, with headquarters at Kansas City, Mo. **W. T. Stewart**, assistant superintendent of the Kansas City Joint Agency, has been promoted to trainmaster of the Kansas City division, with headquarters at Ottumwa.

Trevor Wood, assistant superintendent of the Canadian Pacific at Moose Jaw, Sask., has been promoted to superintendent of the Moose Jaw division, with the same headquarters, succeeding **J. C. Jones**, who becomes general superintendent of the Alberta district, with headquarters at Calgary, Alta., where he replaces **W. S. Hall**, who in turn has been advanced to assistant general manager at Vancouver, B. C., succeeding **C. A. Cotterell**, who has retired after more than 50 years of service. **George H. Bailie**, general superintendent at Vancouver, has been promoted to general manager, western lines, with headquarters at Winnipeg, Man.

C. B. Kurtz, trainmaster of the Atchison, Topeka & Santa Fe at San Angelo, Tex., has been transferred to Waynoka, Okla., succeeding **F. A. Donnell**, who in turn has been transferred to Amarillo, Tex., where he replaces **R. D. Shelton**. Mr. Shelton has been transferred to Dodge City, Kan., relieving **E. J. Lodge**, who has retired. **R. D. McGee** has been appointed trainmaster in charge of the First and Second districts of the Pecos division, with headquarters at Clovis, N. M., succeeding **T. J. Anderson**, who takes jurisdiction over the Clovis Terminal and the Roswell and Carlsbad districts, with headquarters as before at Clovis. He succeeds **C. W. Herbert**, who in turn goes to San Angelo, relieving Mr. Kurtz.

Arthur W. Conley, general supervisor of terminals of the Baltimore & Ohio at Baltimore, Md., has been appointed chief of yard and terminal operations with system jurisdiction. **John Edwards, Jr.**, superintendent of the Akron division at Akron, Ohio, has been advanced to assistant general superintendent of transportation at Baltimore, following the retirement of **J. D. Clarke**, superintendent of freight transportation, after 52 years of service. The position of superintendent of freight transportation has been abolished. **C. T. Williams**, superintendent of the Chicago division at Garrett, Ind., succeeds Mr. Edwards as superintendent of the Akron division. **A. W. Colnot**, assistant superintendent of the Pittsburgh division at Pittsburgh, Pa., succeeds Mr. Williams as superintendent at Garrett. **T. E. Johnson**, trainmaster at Pittsburgh, Pa., has been advanced to succeed Mr. Colnot as assistant superintendent at Pittsburgh. **C. H. Richards** has been named trainmaster at Pittsburgh, and **S. A. O'Neill** terminal trainmaster at New Castle Junction, Pa.

TRAFFIC

H. B. Halsted, district traffic manager of the Kansas City Southern at Chicago, has been promoted to assistant to the vice-president, traffic, with headquarters at Kansas City, Mo. **Harry J. McCarthy**, general agent at Detroit, has been ad-

vanced to district traffic manager, with headquarters at Chicago, replacing Mr. Halsted, and T. F. Brennan has been appointed general agent at Detroit, relieving Mr. McCarthy. L. A. Kelley has been appointed general agent at Cincinnati, Ohio, succeeding Mr. Brennan.

Frank O'Kane, general freight agent of the Chicago, Rock Island & Pacific at Fort Worth, Tex., has been promoted to assistant freight traffic manager, with the same headquarters.

John I. Robertson has been appointed general agent of the Pittsburgh & West Virginia, with headquarters at St. Louis, Mo., succeeding Frank S. Swaney, who has been appointed general agent at Cleveland, Ohio.

J. P. Patterson, senior assistant to vice-president, freight traffic, of the New York Central at New York, has been appointed general freight traffic manager there. Mr. Patterson was born at St. Catharines, Ont. He entered railroading in 1907 as a general clerk for the New York Central at Buffalo, N. Y., where he became chief clerk in 1915, then chief clerk to freight traffic manager, and later chief clerk, consolidated office of assistant traffic



J. P. Patterson

manager and freight traffic manager. In 1923, he became division freight agent at Toledo, Ohio; in 1925, assistant to traffic manager at New York; in January, 1927, assistant freight traffic manager at Chicago; in November, 1927, freight traffic manager at Chicago; and in 1931, traffic manager there. Mr. Patterson went to New York as assistant general freight traffic manager in 1935. He has most recently served as senior assistant to vice-president, previous to his recent advancement.

C. E. Sawyer, district passenger agent of the Southern at Cleveland, Ohio, has been promoted to division passenger agent at Cincinnati, Ohio, succeeding W. H. Calahan, deceased. F. H. Boone, city passenger agent at Memphis, Tenn., has been advanced to district passenger agent, with the same headquarters, replacing O. K. Rodewald, who has been transferred to Cleveland, where he succeeds Mr. Sawyer. T. L. Reed, district passenger agent at Columbia, S. C., has been advanced to division passenger agent, with headquarters at New Orleans, La., succeeding S. W.

Beacham, who becomes assistant general freight agent at New Orleans.

William J. Siering, whose promotion to assistant traffic manager of the Missouri Pacific, with headquarters at Detroit, Mich., was reported in the *Railway Age* of December 8, entered railway service with the Missouri Pacific in March, 1923, as a stenographer at St. Louis, Mo. He served in various capacities until March 1, 1927, when he was promoted to secretary of



William J. Siering

the freight traffic I. C. C. rate department. In 1928 Mr. Siering became secretary to the assistant vice-president and served in this capacity for the vice-president and chief traffic officer until October 1, 1940, when he was advanced to general agent, with headquarters at Seattle, Wash. In January, 1943, he was transferred to San Francisco, Cal., remaining in that location until his new promotion.

J. F. Fallon, commerce agent of the Great Northern at St. Paul, Minn., has been promoted to assistant general freight agent, with the same headquarters, succeeding O. M. Anderson, who has been transferred to Seattle, Wash.

C. H. Faupel, general agent of the Central of New Jersey at Detroit, Mich., has been promoted to general western freight agent, with headquarters at Chicago. E. P. Seiwert has been appointed general agent at Detroit, succeeding Mr. Faupel.

William V. Hardie, former director of the bureau of traffic for the Interstate Commerce Commission at Washington, D. C., has been appointed traffic consultant of the St. Louis-San Francisco, with headquarters at Springfield, Mo., and St. Louis.

R. V. Johnston, division passenger agent of the Baltimore & Ohio, at Detroit, Mich., has been promoted to assistant general passenger agent, with the same headquarters. The position of division passenger agent has been abolished.

The New York, New Haven & Hartford has announced the following changes in its traffic organization: Samuel A. Hutchings, district traffic agent at Springfield, Mass., has been advanced to general traffic agent, Portland, Me. Gerald J. Shea, traffic representative at Springfield, succeeds him as district traffic agent there. Edward A. Whiting, traffic representa-

tive at Portland, has been named district traffic agent there.

Elmer A. Bohmeyer, assistant passenger traffic manager of the Missouri-Kansas-Texas at St. Louis, Mo., has been promoted to passenger traffic manager, with the same headquarters, succeeding William H. Fenwick, who has retired after 56 years of service.

J. S. Smith, assistant general freight agent of the Missouri Pacific at St. Louis, Mo., has been promoted to general freight agent, with the same headquarters, succeeding J. F. Harris, who has retired. R. L. Brown has been appointed assistant general freight agent at St. Louis, relieving Mr. Smith. E. B. Herrington, assistant general freight agent at St. Louis, has been promoted to general freight agent, with the same headquarters, replacing L. J. Sickel, whose retirement was reported in the *Railway Age* of September 8, 1945. H. C. Westbrook has been appointed general freight agent, also at St. Louis, succeeding P. H. Coon, who has been assigned to other duties. J. Cardenas, Jr., has been appointed general freight agent, with headquarters at Monterrey, Mexico, relieving J. G. Pena, who has resigned. A. P. Boles has been appointed director of agricultural development at St. Louis, succeeding J. T. Stinson, who has retired.

ENGINEERING & SIGNALING

Olive W. Dennis, engineer of service for the Baltimore & Ohio at Baltimore, Md., has been advanced to research engineer there.

H. B. Barry, assistant chief engineer of the St. Louis-San Francisco at Springfield, has been promoted to chief engineer, with the same headquarters, succeeding F. G. Jonah, whose death on December 7 was reported in the *Railway Age* of December 15.

R. R. Wood, senior signal supervisor of the Missouri-Kansas-Texas at Denison, Tex., has been promoted to signal engineer, with the same headquarters, succeeding in part to the duties of J. A. Johnson, superintendent of telegraph and signals, who has retired. The position of superintendent of telegraph and signals has been abolished. Herman Krattiger, chief clerk, has been promoted to superintendent of communications, also succeeding in part to the duties of Mr. Johnson.

H. M. Goehring, office engineer of the Great Northern at St. Paul, Minn., has been promoted to assistant chief engineer at Seattle, Wash., where he succeeds H. J. Seyton, whose promotion to chief engineer at St. Paul was reported in the *Railway Age* of January 5. R. R. Manion, trainmaster at Minneapolis, Minn., before entering the service of the armed forces in 1942, has returned to the road as engineer of maintenance of way at St. Paul, a newly-created position. M. A. McChesney, chief draftsman at St. Paul, has been promoted to office engineer, with the same headquarters, succeeding Mr. Goehring. J. W. Hayes, assistant architect, has been advanced to architect, with headquarters as before at St. Paul, replacing T. D.



Kansas City Southern 2-10-4s built by Lima

THE **MOST** FOR YOUR DOLLAR

The high-speed steam locomotive pays the highest returns, on the dollars invested, of any type of motive power, considered on the basis of initial cost, performance, and maintenance expense.

And Lima's insistence upon the highest standards of workmanship and materials assures the efficient performance of Lima-built steam power throughout years of heavy service.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

McMahon, who has retired after 40 years of service.

R. B. Jones, engineer of track of the Canadian Pacific at Montreal, Que., has been promoted to assistant chief engineer, system, with the same headquarters, a newly-created position. **W. G. Dyer**, division engineer at Penticton, B. C., has been advanced to engineer of track, with headquarters at Montreal, succeeding Mr. Jones.

MECHANICAL

B. R. Ghar has been appointed A. A. R. inspector for the Erie at Cleveland, Ohio, succeeding **G. P. Clifford**, who has retired. **H. C. Green** has also been named A. A. R. inspector there, succeeding **L. F. Rozesky**, resigned.

Frank H. Einwaechter, mechanical engineer of the Baltimore & Ohio at Mt. Clare, Baltimore, Md., has been promoted to chief of motive power and equipment at Baltimore, succeeding **W. B. Whitsitt**, who has retired after 43 years in the motive power department.

J. G. Rayburn, chief car inspector for the Chesapeake & Ohio at Richmond, Va., has been appointed shop superintendent, Russell car shop, Russell, Ky., succeeding **O. F. Weik**, who has been assigned to other duties.

F. Cebulla, assistant master car builder of the Great Northern at St. Paul, Minn., has been promoted to master car builder, with the same headquarters, succeeding **P. P. Barthelemy**, who has retired after 44 years of service. **N. E. Carlson** has been appointed assistant master car builder at St. Paul.

PURCHASES AND STORES

J. H. Liebenthal, purchasing agent of the Chicago, Indianapolis & Louisville, with headquarters at Chicago, has retired after more than 55 years of service.

R. Bostwick, general storekeeper of the Chicago, Indianapolis & Louisville, has been appointed purchasing agent, in addition to his duties as general storekeeper, with headquarters as before at LaFayette, Ind., succeeding **J. H. Liebenthal**, who has retired after 55 years of service.

SPECIAL

W. G. Muschler, district storekeeper of the Chicago, Burlington & Quincy at Galesburg, Ill., has been promoted to superintendent of reclamation and scrap, with headquarters at Eola, Ill., succeeding **T. J. Hegeman**, who has retired after 45½ years of service.

D. R. Prince, assistant superintendent of safety of the Southern Pacific at Houston, Tex., has been promoted to superintendent of safety and fuel supervisor, with the same headquarters, succeeding **W. F. Rentzel**, who has retired. **J. L. Young** has been appointed assistant superintendent of safety at Houston, replacing Mr. Prince.

Dr. Bradley L. Coley, recently returned from military service, has resumed his duties as chief surgeon of the New York Central at New York, succeeding **Dr. Earl G. Burdick**, who has served as chief surgeon during Dr. Coley's absence.

OBITUARY

Joseph J. Oslie, assistant general passenger agent of the Chicago, Milwaukee, St. Paul & Pacific at St. Paul, Minn., died in that city on December 28.

Henry G. Lochmuller, who retired in 1941 as assistant to general auditor, disbursements, for the New York Central, died on December 20.

Ralph C. Miller, comptroller of the Pennsylvania at Philadelphia, Pa., whose death on December 11 was reported in the December 15 issue of *Railway Age*, was born in 1878 at Zanesville, Ohio. He was graduated from Ohio State University in 1901, having spent his summer vacations as an assistant on the Zanesville division engineering corps of the Pennsylvania. He



Ralph C. Miller

entered the permanent service of that road as an engineering corps assistant at Pittsburgh, Pa., in 1901, and subsequently served in engineering posts on both the eastern and western lines of the system. He was advanced to superintendent of the Schuylkill division in 1926, and later headed the Toledo and Columbus divisions. In 1930 he became acting assistant chief engineer at Philadelphia, and in 1931, general superintendent of the Southwestern division at Indianapolis, Ind., later being transferred to Pittsburgh. Mr. Miller was promoted to assistant chief engineer, Philadelphia, in 1940, and became comptroller there in 1943.

Francis Lorn C. Bond, former vice-president of the Canadian National at Toronto, Ont., whose death on December 9 was reported in the December 22 issue of *Railway Age*, was born at Montreal, Que., on February 21, 1877. He was graduated from McGill University in 1898, and entered the service of the Grand Trunk Western in that year as assistant to the resident engineer, Eastern division. He was advanced to engineer of double track construction in 1901. From January to March, 1902, he was night superintendent

on construction of the Park Avenue tunnel of the New York subway system, returning to the Grand Trunk in April, 1902,

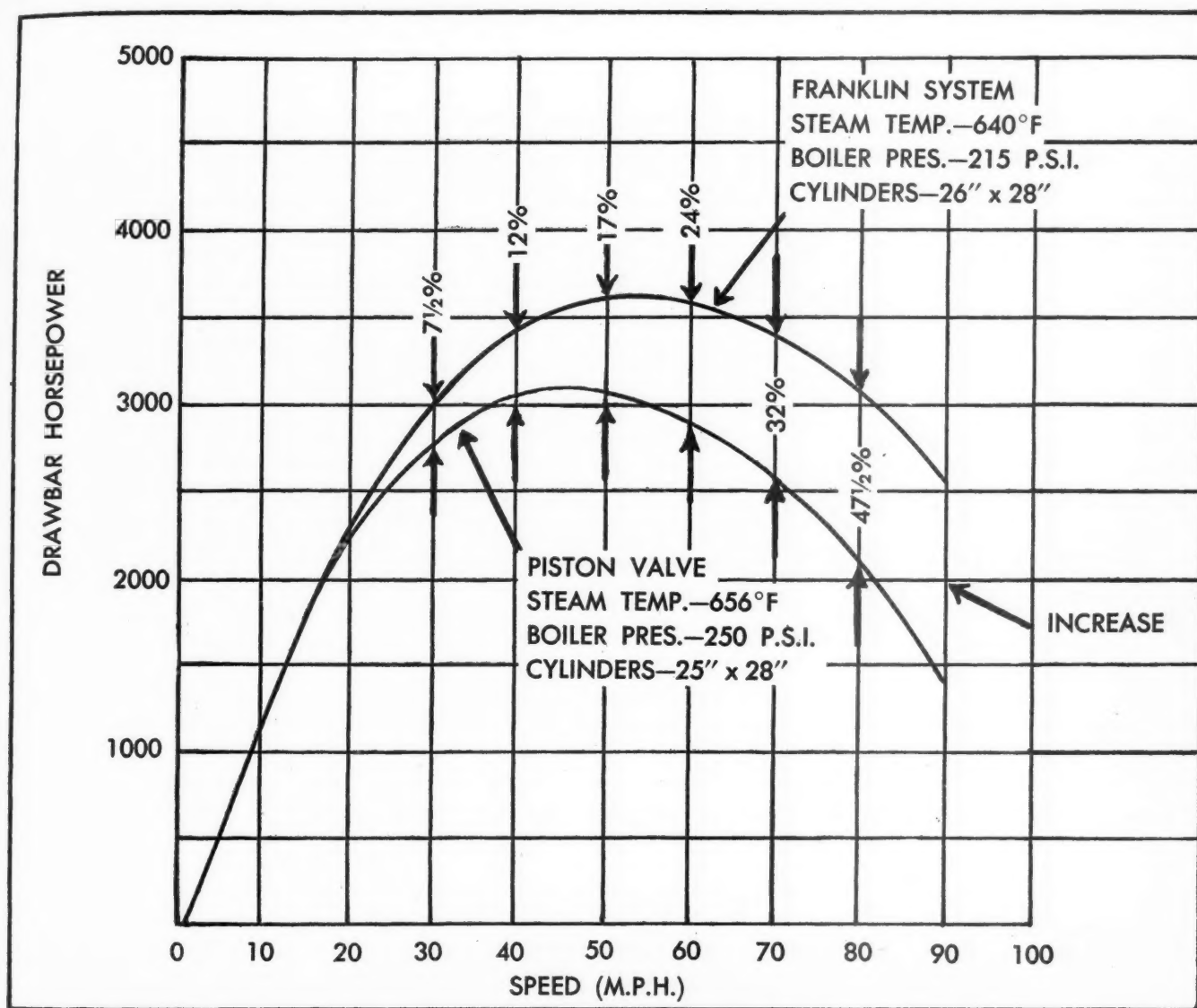


Francis Lorn C. Bond

as resident engineer, Eastern division. He was advanced to division engineer on the Eastern lines in 1913. After service in World War I, Major Bond returned to the Grand Trunk as chief engineer, and following amalgamation of the lines comprising the Canadian National, he was appointed regional chief engineer, central region, with headquarters at Toronto. In 1924, he was appointed general superintendent of the Montreal division, and in 1936, general manager of the Central region. Major Bond was elected vice-president in 1939, in addition to his duties as general manager. He retired early in 1944.

R. W. Retterer, superintendent of equipment of the New York Central at Indianapolis, Ind., died in that city on December 28.

W. A. Worthington, who retired as vice-president of the Southern Pacific in 1942, died on December 25 at San Francisco, Cal. Mr. Worthington was born in Vallejo, Cal., on June 18, 1872, and began his career with the Southern Pacific as a stenographer and clerk to the superintendent of the Sacramento division in 1887. From 1888 to 1904 he became, successively, statistician and chief clerk in the general manager's office in San Francisco, and executive secretary to the president. He was then transferred to Chicago as chief clerk to the director of maintenance and operation for the Southern Pacific and the Union Pacific railroads, and in 1907 became assistant to the director of maintenance and operation for the same roads, first at Chicago and later at New York. In 1913 he was appointed vice-president and assistant to the chairman of the Southern Pacific Company at New York, and in 1925 he was transferred to San Francisco. Mr. Worthington was connected with the nation-wide Committee on Railway Mail Pay for over 30 years and was chairman of that committee for 20 years. In addition, he was a member of the General Committee of the Operating Transportation division of the Association of American Railroads and its predecessor committee since 1913, including service as chairman of this and also of a number of other committees acting in behalf of all railroads in the United States.

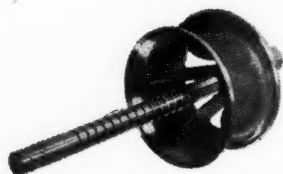


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The alternative, involving higher steam pressure, would necessitate a new boiler, frame and running gear. Even then, the drawbar horsepower, with piston valves, would be substantially less than with The Franklin System.

You too may find that the answer to today's demand for greater power and speed is The Franklin System of Steam Distribution.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.

NEW YORK • CHICAGO • MONTREAL

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945

(Table continued on next left-hand page)

when the job is **TOUGH**

Hauling today's long trains at sustained high speeds calls for heavy fuel consumption — and fuel is a vital commodity.

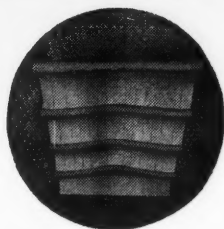
To secure maximum power from every ton of coal burned, a com-

plete brick arch in the firebox should always be maintained.

When that arch is of Security arch brick, a maximum length of service and low maintenance costs are assured.



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REFRATORIES CO.**
Refractories Specialists



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Locomotive Combustion Specialists

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED

| Name of road | Av. mileage operated during period | Operating revenues | | | Operating expenses | | | Operating ratio | Net from operation | | Net railway operating income | |
|--|------------------------------------|--------------------|-------------|--------------------|--------------------|--------------------------|-----------|-----------------|--------------------|----------------------|------------------------------|-------------|
| | | Freight | Passenger | Total (inc. misc.) | Way and structures | Maintenance of equipment | Traffic | | from operation | Railway tax accruals | 1945 | 1944 |
| Chicago, Milwaukee, St. Paul & Pacific | Nov. 10,731 | \$12,801,059 | \$3,722,106 | \$18,394,733 | \$3,459,222 | \$6,278,150 | \$293,105 | 95.9 | \$756,761 | \$1,607,000 | \$1,924,769 | \$2,861,544 |
| Chicago, Rock Island & Pacific | 11 mos. 10,727 | 158,273,487 | 33,112,792 | 212,390,024 | 41,579,605 | 44,812,549 | 3,277,925 | 79.5 | 43,434,264 | 14,843,000 | 25,674,638 | 29,911,641 |
| | Nov. 7,752 | 9,460,293 | 3,587,896 | 14,277,987 | 2,195,215 | 2,094,384 | 339,274 | 69.6 | 4,334,117 | 2,159,021 | 1,645,248 | 1,446,977 |
| | 7,751 | 127,794,652 | 38,766,166 | 179,857,055 | 26,537,229 | 25,318,054 | 3,827,883 | 63.7 | 65,222,691 | 34,344,830 | 24,657,169 | 25,530,431 |
| Chicago, St. Paul, Minneapolis & Omaha | Nov. 1,617 | 1,901,864 | 372,210 | 2,490,284 | 347,436 | 602,797 | 44,435 | 84.1 | 396,257 | 127,401 | 184,680 | 410,309 |
| Clinchfield | 11 mos. 1,617 | 19,559,769 | 4,163,403 | 25,994,406 | 3,597,270 | 4,318,087 | 450,649 | 75.3 | 6,423,757 | 2,265,263 | 3,377,129 | 3,302,301 |
| | Nov. 302 | 910,028 | 8,188 | 928,985 | 86,943 | 197,231 | 23,374 | 61.7 | 336,076 | 106,004 | 4,289,513 | 468,006 |
| | 302 | 11,980,098 | 118,669 | 12,200,607 | 1,090,761 | 2,165,687 | 246,214 | 54.0 | 5,616,401 | 1,354,209 | 4,590,731 | 5,638,555 |
| Colorado & Southern | Nov. 748 | 981,709 | 292,367 | 1,378,577 | 179,864 | 175,418 | 17,537 | 61.0 | 537,877 | 203,154 | 274,925 | 296,759 |
| Fort Worth & Denver City | 11 mos. 748 | 10,271,690 | 2,994,419 | 14,458,018 | 2,186,014 | 2,329,959 | 196,638 | 67.6 | 4,681,924 | 1,752,235 | 2,320,688 | 2,705,904 |
| | Nov. 804 | 797,622 | 386,680 | 1,293,513 | 158,151 | 158,151 | 28,266 | 64.2 | 462,648 | 200,423 | 227,695 | 361,061 |
| | 804 | 9,343,423 | 4,522,745 | 15,107,438 | 3,489,176 | 2,153,526 | 299,462 | 69.6 | 4,585,970 | 1,931,624 | 2,177,830 | 2,795,256 |
| Colorado & Wyoming | Nov. 42 | 80,245 | 120,493 | 10,885 | 18,615 | 17,548 | 713 | 67.8 | 38,708 | 19,571 | 19,303 | 22,967 |
| Columbus & Greenville | 11 mos. 168 | 1,337,822 | 97,395 | 1,531,331 | 357,592 | 226,974 | 51,514 | 96.3 | 4,924 | 9,372 | 4,746 | 6,690 |
| | Nov. 168 | 1,337,822 | 97,395 | 1,531,331 | 357,592 | 226,974 | 51,514 | 86.5 | 206,524 | 174,830 | 43,823 | 106,849 |
| Delaware & Hudson | Nov. 846 | 3,203,875 | 106,693 | 3,406,410 | 437,954 | 848,250 | 49,027 | 80.6 | 660,997 | 300,846 | 400,678 | 690,369 |
| Delaware, Lackawanna & Western | 11 mos. 846 | 3,219,209 | 2,066,542 | 42,511,988 | 5,435,813 | 14,358,088 | 528,663 | 87.1 | 5,480,352 | 2,498,197 | 2,672,008 | 8,081,431 |
| | Nov. 973 | 4,615,926 | 922,552 | 5,530,668 | 707,077 | 1,024,575 | 126,668 | 79.1 | 1,073,026 | 505,000 | 359,777 | 861,318 |
| | 973 | 50,552,616 | 9,977,383 | 66,975,038 | 8,762,047 | 11,974,100 | 1,251,192 | 80.6 | 13,983,347 | 8,292,633 | 4,539,606 | 5,624,438 |
| Denver & Rio Grande Western | Nov. 2,386 | 4,128,376 | 1,058,026 | 5,447,313 | 865,384 | 1,153,600 | 126,313 | 79.4 | 1,121,235 | 569,787 | 459,163 | 873,360 |
| Denver & Salt Lake | 11 mos. 2,386 | 57,422,344 | 9,429,945 | 69,742,076 | 10,659,857 | 22,066,429 | 1,144,300 | 81.1 | 13,213,542 | 1,740,845 | 693,296 | 12,672,527 |
| | Nov. 232 | 352,634 | 9,438 | 374,485 | 66,706 | 55,238 | 3,111 | 76.6 | 150,214 | 30,946 | 95,948 | 72,674 |
| | 232 | 2,911,182 | 99,247 | 3,137,570 | 585,273 | 598,026 | 36,128 | 76.6 | 733,680 | 330,138 | 916,425 | 835,203 |
| Detroit & Mackinac | Nov. 230 | 95,134 | 5,381 | 107,872 | 14,370 | 14,368 | 542 | 64.0 | 38,274 | 4,323 | 27,039 | 17,647 |
| Detroit & Toledo Shore Line | 11 mos. 230 | 748,242 | 104,659 | 939,775 | 202,394 | 176,033 | 8,356 | 83.7 | 153,517 | 48,259 | 62,930 | 61,712 |
| | Nov. 50 | 297,538 | 299,117 | 29,510 | 24,120 | 24,120 | 9,619 | 58.2 | 125,145 | 38,909 | 34,800 | 54,188 |
| | 50 | 3,667,226 | 3,684,585 | 3,684,585 | 424,767 | 303,478 | 110,133 | 55.7 | 1,633,298 | 535,886 | 479,148 | 634,365 |
| Detroit, Toledo & Ironton | Nov. 464 | 572,949 | 1,316 | 625,273 | 84,732 | 143,351 | 15,961 | 74.1 | 161,813 | 68,467 | 66,467 | 197,397 |
| Duluth, Missabe & Iron Range | 11 mos. 464 | 7,375,412 | 16,770 | 7,445,445 | 1,089,337 | 1,422,311 | 169,315 | 67.0 | 2,556,294 | 1,164,017 | 1,345,332 | 1,904,088 |
| | Nov. 546 | 1,941,173 | 4,296 | 1,945,469 | 353,506 | 314,178 | 709,947 | 87.5 | 203,783 | 41,650 | 175,929 | 380,379 |
| | 546 | 33,619,248 | 58,149 | 38,945,786 | 4,217,631 | 5,667,713 | 54,930 | 47.7 | 20,379,185 | 9,320,317 | 11,208,593 | 11,693,675 |
| Duluth, Winnipeg & Pacific | Nov. 175 | 238,000 | 1,200 | 245,100 | 60,886 | 30,130 | 2,387 | 80.9 | 46,701 | 19,105 | 5,851 | —37,506 |
| Elgin, Joliet & Eastern | 11 mos. 175 | 2,495,000 | 26,200 | 2,495,300 | 562,590 | 339,899 | 26,478 | 80.2 | 493,190 | 199,237 | 14,865 | 179,425 |
| | Nov. 392 | 1,941,173 | 10 | 2,299,648 | 122,797 | 400,225 | 16,888 | 66.1 | 778,767 | 297,912 | 404,409 | 578,768 |
| | 392 | 24,803,781 | 374 | 29,118,241 | 2,797,346 | 7,776,841 | 189,038 | 76.2 | 6,936,656 | 3,280,763 | 2,784,612 | 3,311,820 |
| Erie | Nov. 2,243 | 8,228,887 | 1,270,052 | 10,203,857 | 1,624,969 | 2,109,746 | 238,477 | 93.4 | 671,219 | 605,717 | 784,978 | 1,144,079 |
| Florida East Coast | 11 mos. 2,243 | 109,293,267 | 12,041,663 | 129,915,509 | 15,885,513 | 29,952,344 | 2,619,167 | 83.3 | 21,666,542 | 1,143,422 | 13,595,326 | 17,852,716 |
| | Nov. 682 | 1,084,810 | 802,913 | 2,082,766 | 290,490 | 357,079 | 52,422 | 75.2 | 516,529 | 119,236 | 342,845 | 392,309 |
| | 682 | 13,092,424 | 11,673,486 | 27,080,653 | 3,618,715 | 3,736,074 | 630,695 | 65.6 | 9,323,699 | 3,984,559 | 4,333,875 | 5,575,142 |
| Georgia Railroad | Nov. 328 | 515,297 | 112,761 | 668,886 | 93,604 | 149,349 | 23,858 | 90.7 | 61,939 | 33,551 | 31,288 | 265,988 |
| Georgia & Florida | 11 mos. 328 | 6,613,155 | 1,637,839 | 8,781,520 | 1,047,788 | 1,538,567 | 245,710 | 75.3 | 2,135,301 | 364,464 | 1,738,954 | 2,776,901 |
| | Nov. 408 | 182,697 | 4,296 | 192,150 | 50,389 | 57,302 | 80,884 | 82.4 | 14,515 | 11,532 | —11,346 | 11,154 |
| | 408 | 1,881,610 | 54,322 | 1,990,173 | 520,176 | 292,672 | 118,414 | 88.2 | 234,439 | 119,085 | —4,910 | 119,108 |
| Grand Trunk Western | Nov. 1,026 | 2,317,000 | 436,000 | 2,945,000 | 477,263 | 511,562 | 37,371 | 83.2 | 493,828 | 199,712 | 262,296 | 598,200 |
| Canadian National Lines in New England | 11 mos. 1,026 | 27,521,000 | 4,151,000 | 33,861,000 | 6,114,339 | 5,740,290 | 413,832 | 79.7 | 6,862,602 | 2,122,277 | 4,386,602 | 4,930,845 |
| | Nov. 172 | 110,000 | 8,000 | 140,100 | 21,363 | 27,567 | 94,416 | 152.0 | —72,894 | 21,189 | —126,153 | 74,328 |
| | 172 | 1,700,000 | 133,800 | 2,093,900 | 617,240 | 300,208 | 1,084,283 | 108.1 | —170,572 | 233,079 | —835,498 | —1,022,763 |
| Great Northern | Nov. 8,332 | 11,027,243 | 2,105,397 | 14,307,894 | 4,582,823 | 5,593,682 | 241,096 | 118.1 | —2,593,274 | 2,759,058 | 2,832 | 1,893,099 |
| Green Bay & Western | 11 mos. 8,332 | 155,576,778 | 18,532,706 | 188,059,301 | 34,373,624 | 44,835,953 | 2,605,396 | 75.2 | 46,720,808 | 16,763,550 | 29,115,484 | 28,736,275 |
| | Nov. 234 | 206,475 | 437 | 211,093 | 33,545 | 23,701 | 8,610 | 73.6 | 55,633 | 30,017 | 18,394 | —3,565 |
| | 234 | 2,412,557 | 5,814 | 2,487,902 | 687,305 | 257,725 | 94,381 | 78.4 | 534,957 | 362,834 | 94,026 | 143,994 |
| Gulf & Ship Island | Nov. 259 | 177,847 | 33,435 | 229,380 | 59,402 | 22,765 | 3,023 | 72.6 | 62,763 | 44,628 | 1,878 | —59,865 |
| | 259 | 2,216,804 | 532,538 | 2,990,660 | 574,847 | 331,407 | 31,463 | 69.6 | 908,271 | 426,434 | 310,316 | 246,580 |

(Table continued on next left-hand page)

Railway Age—January 12, 1946



An Elesco ART

The Elesco type of superheater was the first firetube superheater applied to a locomotive in this country.

Today Elesco leads the world in the latest and most improved superheater designs in all fields. Every technical requirement of design and manufacture of superheater units is fulfilled.

Unserviceable locomotive superheater units sent to our plant for REmanufacture, go through the same process as is used in the manufacture of new units.

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SUPERHEATER
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1762

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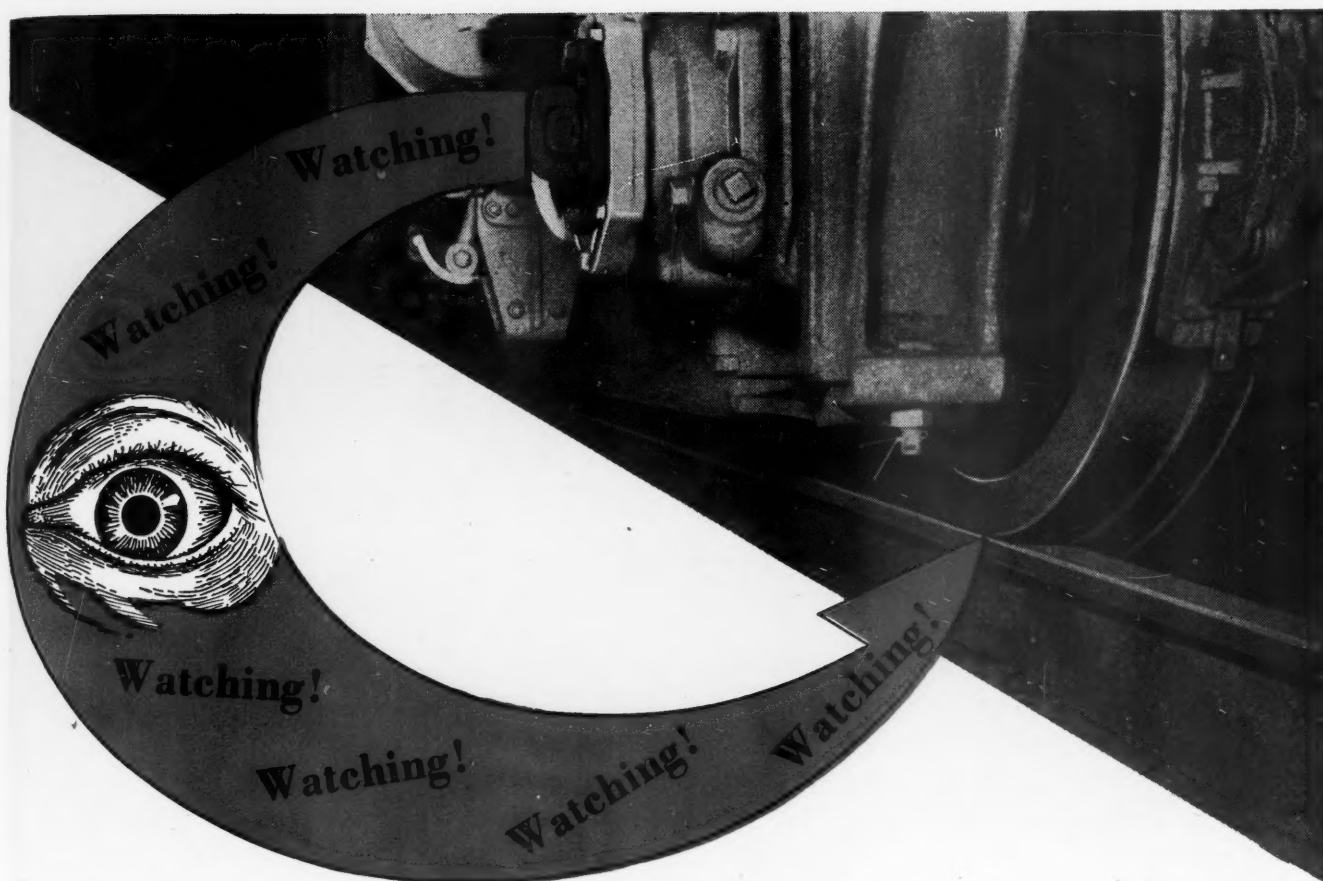
REVENUES AND EXPENSES OF RAILWAYS

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED

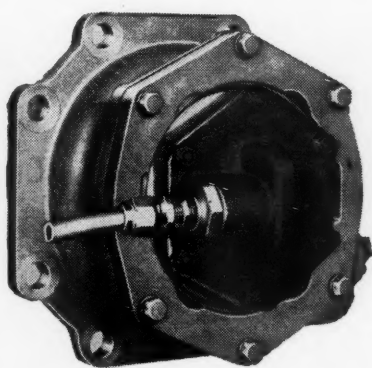
| AV. MILEAGE OPERATED DURING PERIOD AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED | | | | | | | | | | | | | |
|--|---------------|--------------------|------------|--------------------|--------------------|--------------------------|-------------|-----------------|----------------------------|------------------------------|------------|----------------------|-----------|
| Name of road | Period | Operating revenues | | | Operating expenses | | | Operating ratio | Net from railway operation | Net railway operating income | | | |
| | | Freight | Passenger | Total (inc. misc.) | Way and structures | Maintenance of equipment | Traffic | | | Transportation | Total | Railway tax accruals | 1945 | 1944 |
| Gulf, Mobile & Ohio | Nov. 1,945 | \$2,616,741 | \$189,995 | \$2,806,736 | \$767,585 | \$633,640 | \$1,333,924 | 40,219 | 837,169 | 1,743,597 | 310,340 | 277,788 | 214,147 |
| Illinois Central | 11 mos. 1,944 | 31,611,478 | 2,580,178 | 34,191,656 | 6,360,960 | 6,258,646 | 10,134,188 | 419,979 | 9,631,400 | 20,475,251 | 3,428,079 | 4,493,534 | 4,027,849 |
| | Nov. 4,822 | 11,036,071 | 2,450,933 | 13,487,004 | 2,451,050 | 2,844,763 | 233,957 | 272,766 | 5,876,513 | 12,988,925 | 2,248,525 | 1,359,198 | 2,027,849 |
| Yazoo & Mississippi Valley | 11 mos. 4,882 | 148,840,025 | 30,906,032 | 179,746,057 | 28,941,053 | 34,693,828 | 2,432,394 | 34,748,945 | 67,145,733 | 151,621,128 | 24,402,917 | 27,026,161 | |
| Illinois Central System | Nov. 1,524 | 20,326,216 | 269,461 | 20,595,677 | 488,152 | 295,897 | 40,219 | 837,169 | 1,743,597 | 3,617,115 | 310,340 | 277,788 | 214,147 |
| | 11 mos. 1,524 | 20,326,216 | 269,461 | 20,595,677 | 488,152 | 295,897 | 40,219 | 837,169 | 1,743,597 | 3,617,115 | 310,340 | 277,788 | 214,147 |
| Illinois Terminal | Nov. 6,346 | 173,365,100 | 34,496,845 | 207,861,945 | 34,748,945 | 38,310,943 | 2,852,373 | 34,748,945 | 67,145,733 | 151,621,128 | 24,402,917 | 27,026,161 | |
| Kansas City Southern | Nov. 476 | 526,593 | 151,445 | 678,038 | 157,929 | 658,043 | 19,620 | 302,316 | 1,167,659 | 2,393 | 1,121,634 | 1,311,789 | 1,140,055 |
| | 11 mos. 476 | 526,593 | 151,445 | 678,038 | 157,929 | 658,043 | 19,620 | 302,316 | 1,167,659 | 2,393 | 1,121,634 | 1,311,789 | 1,140,055 |
| Kansas, Oklahoma & Gulf | Nov. 890 | 1,828,983 | 248,814 | 2,077,797 | 367,678 | 520,581 | 67,332 | 3,292,359 | 9,451,612 | 21,018,801 | 6,129,655 | 5,829,633 | |
| | 11 mos. 890 | 1,828,983 | 248,814 | 2,077,797 | 367,678 | 520,581 | 67,332 | 3,292,359 | 9,451,612 | 21,018,801 | 6,129,655 | 5,829,633 | |
| Lake Superior & Ishpeming | Nov. 328 | 329,195 | 1,930 | 331,125 | 38,188 | 28,610 | 10,876 | 78,642 | 168,671 | 74,790 | 63,138 | 91,855 | |
| | 11 mos. 328 | 329,195 | 1,930 | 331,125 | 38,188 | 28,610 | 10,876 | 78,642 | 168,671 | 74,790 | 63,138 | 91,855 | |
| Lehigh & Hudson River | Nov. 156 | 138,157 | 84 | 138,241 | 32,227 | 33,630 | 725 | 57,499 | 133,243 | 24,326 | 36,751 | 30,876 | |
| | 11 mos. 156 | 138,157 | 84 | 138,241 | 32,227 | 33,630 | 725 | 57,499 | 133,243 | 24,326 | 36,751 | 30,876 | |
| Lehigh & New England | Nov. 96 | 183,214 | 183,910 | 367,124 | 45,187 | 38,895 | 5,446 | 67,348 | 164,064 | 19,846 | 13,586 | 16,664 | |
| | 11 mos. 96 | 183,214 | 183,910 | 367,124 | 45,187 | 38,895 | 5,446 | 67,348 | 164,064 | 19,846 | 13,586 | 16,664 | |
| Lehigh Valley | Nov. 1,254 | 4,356,261 | 828,121 | 5,184,382 | 582,880 | 1,453,595 | 87,249 | 1,671,197 | 4,017,131 | 72,000 | 238,994 | 83,314 | |
| | 11 mos. 1,254 | 4,356,261 | 828,121 | 5,184,382 | 582,880 | 1,453,595 | 87,249 | 1,671,197 | 4,017,131 | 72,000 | 238,994 | 83,314 | |
| Louisiana & Arkansas | Nov. 1,258 | 6,651,379 | 74,800,071 | 81,451,450 | 2,607,699 | 2,167,580 | 387,683 | 249,341 | 5,320,391 | 11,172,319 | 1,857,932 | 1,618,642 | |
| | 11 mos. 1,258 | 6,651,379 | 74,800,071 | 81,451,450 | 2,607,699 | 2,167,580 | 387,683 | 249,341 | 5,320,391 | 11,172,319 | 1,857,932 | 1,618,642 | |
| Louisville & Nashville | Nov. 4,759 | 11,035,633 | 2,302,553 | 13,338,186 | 1,716,306 | 3,343,303 | 249,341 | 246,634 | 59,515,615 | 124,000,759 | 21,743,165 | 22,641,858 | |
| | 11 mos. 4,759 | 11,035,633 | 2,302,553 | 13,338,186 | 1,716,306 | 3,343,303 | 249,341 | 246,634 | 59,515,615 | 124,000,759 | 21,743,165 | 22,641,858 | |
| Maine Central | Nov. 988 | 1,316,752 | 143,766 | 1,460,518 | 4,557,538 | 3,374,894 | 150,423 | 3,744,999 | 93,668 | 96,749 | 11,918 | 96,749 | |
| | 11 mos. 988 | 1,316,752 | 143,766 | 1,460,518 | 4,557,538 | 3,374,894 | 150,423 | 3,744,999 | 93,668 | 96,749 | 11,918 | 96,749 | |
| Midland Valley | Nov. 334 | 133,502 | 24 | 133,526 | 36,475 | 13,353 | 2,487 | 48,811 | 106,320 | 30,145 | 320 | 17,025 | |
| | 11 mos. 334 | 133,502 | 24 | 133,526 | 36,475 | 13,353 | 2,487 | 48,811 | 106,320 | 30,145 | 320 | 17,025 | |
| Minneapolis & St. Louis | Nov. 1,408 | 13,454,259 | 432,670 | 13,886,929 | 2,629,781 | 3,852,652 | 747,764 | 4,358,098 | 1,489,331 | 113,6 | 21,025 | 22,255 | |
| | 11 mos. 1,408 | 13,454,259 | 432,670 | 13,886,929 | 2,629,781 | 3,852,652 | 747,764 | 4,358,098 | 1,489,331 | 113,6 | 21,025 | 22,255 | |
| Minneapolis, St. Paul & Sault Ste. Marie | Nov. 3,224 | 2,395,274 | 1,711,396 | 4,106,670 | 482,218 | 4,907,036 | 39,308 | 983,135 | 1,931,700 | 804,740 | 415,970 | 326,255 | |
| | 11 mos. 3,224 | 2,395,274 | 1,711,396 | 4,106,670 | 482,218 | 4,907,036 | 39,308 | 983,135 | 1,931,700 | 804,740 | 415,970 | 326,255 | |
| Duluth, South Shore & Atlantic | Nov. 550 | 254,013 | 14,047 | 268,060 | 58,585 | 58,585 | 11,943 | 9,718,906 | 20,080,013 | 76,7 | 6,125,318 | 3,438,090 | 214,906 |
| | 11 mos. 550 | 254,013 | 14,047 | 268,060 | 58,585 | 58,585 | 11,943 | 9,718,906 | 20,080,013 | 76,7 | 6,125,318 | 3,438,090 | 214,906 |
| Spokane International | Nov. 152 | 116,208 | 2,186 | 118,394 | 14,378 | 24,666 | 38,856 | 1,489,957 | 3,114,765 | 719,525 | 199,866 | 480,846 | |
| | 11 mos. 152 | 116,208 | 2,186 | 118,394 | 14,378 | 24,666 | 38,856 | 1,489,957 | 3,114,765 | 719,525 | 199,866 | 480,846 | |
| Mississippi Central | Nov. 158 | 108,480 | 12,859 | 121,339 | 48,504 | 211,972 | 48,504 | 3,079 | 480,553 | 87,139 | 69,1 | 22,761 | |
| | 11 mos. 158 | 108,480 | 12,859 | 121,339 | 48,504 | 211,972 | 48,504 | 3,079 | 480,553 | 87,139 | 69,1 | 22,761 | |
| Missouri & Arkansas | Nov. 365 | 1,904,511 | 24,968 | 1,929,479 | 675,262 | 281,211 | 37,157 | 635,778 | 117,410 | 94,3 | 236,548 | 220,194 | |
| | 11 mos. 365 | 1,904,511 | 24,968 | 1,929,479 | 675,262 | 281,211 | 37,157 | 635,778 | 117,410 | 94,3 | 236,548 | 220,194 | |
| Missouri-Illinois | Nov. 172 | 279,304 | 7,482 | 286,786 | 50,591 | 50,591 | 99,972 | 455,763 | 1,247,263 | 538,775 | 211,698 | 335,056 | |
| | 11 mos. 172 | 279,304 | 7,482 | 286,786 | 50,591 | 50,591 | 99,972 | 455,763 | 1,247,263 | 538,775 | 211,698 | 335,056 | |
| Missouri-Kansas-Texas Lines | Nov. 3,253 | 3,652,419 | 1,148,162 | 4,800,581 | 755,287 | 755,287 | 162,471 | 67,024 | 1,446,679 | 98,1 | 22,222 | 3,188 | |
| | 11 mos. 3,253 | 3,652,419 | 1,148,162 | 4,800,581 | 755,287 | 755,287 | 162,471 | 67,024 | 1,446,679 | 98,1 | 22,222 | 3,188 | |
| Missouri Pacific | Nov. 7,082 | 157,144,648 | 31,179,347 | 188,324,000 | 25,505,589 | 25,505,589 | 3,392,633 | 25,505,589 | 20,643,362 | 102,3 | 302,793 | 177,512 | |
| | 11 mos. 7,082 | 157,144,648 | 31,179,347 | 188,324,000 | 25,505,589 | 25,505,589 | 3,392,633 | 25,505,589 | 20,643,362 | 102,3 | 302,793 | 177,512 | |
| Gulf Coast Lines | Nov. 1,734 | 2,503,910 | 306,794 | 2,810,704 | 2,941,141 | 2,941,141 | 64,934 | 59,518,799 | 125,183,140 | 61,4 | 27,980,433 | 31,400,019 | |
| | 11 mos. 1,734 | 2,503,910 | 306,794 | 2,810,704 | 2,941,141 | 2,941,141 | 64,934 | 59,518,799 | 125,183,140 | 61,4 | 27,980,433 | 31,400,019 | |
| International-Great Northern | Nov. 1,110 | 1,789,576 | 433,165 | 2,222,741 | 3,840,143 | 3,840,143 | 630,610 | 10,119,790 | 21,880,544 | 57,4 | 493,427 | 444,937 | |
| | 11 mos. 1,110 | 1,789,576 | 433,165 | 2,222,741 | 3,840,143 | 3,840,143 | 630,610 | 10,119,790 | 21,880,544 | 57,4 | 493,427 | 444,937 | |
| Monongahela | Nov. 170 | 557,998 | 1,626 | 560,624 | 53,179 | 41,385 | 7,052 | 9,025,645 | 19,236,521 | 70,7 | 2,937,837 | 3,189,069 | |
| | 11 mos. 170 | 557,998 | 1,626 | 560,624 | 53,179 | 41,385 | 7,052 | 9,025,645 | 19,236,521 | 70,7 | 2,937,837 | 3,189,069 | |
| | | | | | 714,901 | 494,322 | | | | | | | |
| | | | | | 5,335,691 | | | | | | | | |
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(Table continued on next left-hand page)

90,247 165,905 61,419 323,864 42.6 141,139 240,463 612 7,052 41,385 564,327 1,626 557,998 170 11 mos.
 1,152,386 937,742 679,573 2,588,588 51.5 1,485,833 2,745,103 494,322 5,333,691 24,370 5,269,283 170



On Guard



Softens the Brake
When Wheel Slip Impends

THE "AP" Decelostat keeps tab of the wheel whether moving forward or back. It rolls with the wheel and observes the slightest hesitation in wheel rotation when brakes are applied.

It maintains constant check on the rate of slow-down and is poised to act if this rate reaches a set limit.

And when this limit develops the Decelostat flashes the impulse to the brake cylinders—*softens the brake momentarily*, permitting the offending wheel to get into step with the others in the train.

WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

REVENUES AND EXPENSES OF RAILWAYS

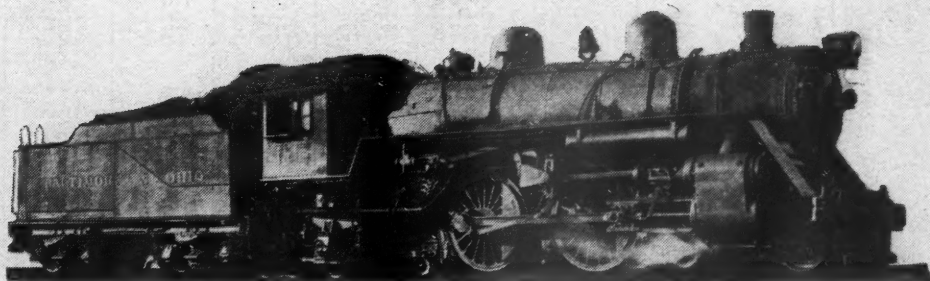
MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED

| NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED | | | | | | | | | | | | |
|---|------------------------------------|--------------------|------------------------|-------------|-----------------------------------|-------------|----------------|-----------------|----------------------------|------------------------------|------------|------------|
| Name of road | Av. mileage operated during period | Operating revenues | | | Operating expenses | | | Operating ratio | Net from railway operation | Net railway operating income | | |
| | | Freight | Passenger (inc. misc.) | Total | Maintenance of way and structures | Traffic | Transportation | | | Railway tax accruals | 1945 | 1944 |
| Montour | Nov. 51 | \$262,840 | ..... | \$262,840 | \$20,574 | \$59,997 | \$79,437 | 64.4 | \$93,943 | \$55,533 | \$71,473 | \$62,279 |
| Nashville, Chattanooga & St. Louis | 11 mos. 51 | 2,604,536 | ..... | 2,604,536 | 232,407 | 669,366 | 803,329 | 69.2 | 806,098 | 601,814 | 629,186 | 721,409 |
| New York Central | 11 mos. 1,071 | 27,059,862 | \$418,682 | 27,478,544 | 730,683 | 706,572 | 1,043,970 | 106.4 | 1,604,995 | Cr. 243,914 | 523,934 | 310,605 |
| Pittsburgh & Lake Erie | Nov. 10,749 | 31,188,921 | 13,814,547 | 45,003,468 | 6,372,241 | 7,569,306 | 11,706,777 | 78.5 | 7,572,750 | 4,406,269 | 3,007,573 | 3,368,459 |
| New York, Chicago & St. Louis | Nov. 10,749 | 391,994,355 | 149,612,388 | 541,606,743 | 94,052,214 | 119,330,412 | 8,194,373 | 86.7 | 6,693,898 | 2,129,689 | 4,059,787 | 4,967,918 |
| New York, New Haven & Hartford | 11 mos. 229 | 26,226,672 | 1,166,183 | 27,392,855 | 3,873,514 | 10,146,726 | 495,293 | 90.6 | 8,013 | 328,912 | 325,853 | 347,693 |
| New York, Ontario & Western | Nov. 1,687 | 5,102,920 | 508,000 | 5,610,920 | 711,731 | 971,478 | 148,728 | 92.1 | 2,254,287 | 4,363,763 | 4,077,535 | 4,888,345 |
| New York Connecting | Nov. 1,838 | 75,046,040 | 3,335,060 | 78,381,100 | 11,326,187 | 24,581,504 | 1,730,120 | 74.0 | 1,498,227 | 293,850 | 902,100 | 1,043,897 |
| New York, Susquehanna & Western | Nov. 1,838 | 5,717,956 | 6,586,259 | 12,304,215 | 1,919,624 | 1,825,419 | 189,711 | 83.3 | 13,391,460 | Cr. 3,217,945 | 12,456,914 | 10,442,892 |
| Norfolk & Western | 11 mos. 2,160 | 117,437,225 | 12,715,536 | 130,152,761 | 20,820,662 | 25,275,468 | 1,843,912 | 72.9 | 3,638,187 | 720,000 | 1,925,969 | 909,875 |
| Norfolk Southern | Nov. 727 | 531,217 | 18,515 | 549,732 | 52,847 | 9,248 | ..... | 71.2 | 45,848,694 | 16,570,005 | 17,607,899 | 19,297,398 |
| Northern Pacific | Nov. 727 | 6,501,227 | 265,499 | 6,766,726 | 177,568 | 9,248 | ..... | 58.9 | 73,023 | 62,333 | 202,943 | 163,288 |
| Northwestern Pacific | Nov. 6,871 | 108,056,100 | 18,237,600 | 126,293,700 | 2,356,238 | 569,048 | 22,341 | 56.3 | 1,030,089 | 784,682 | 1,912,332 | 1,522,860 |
| Oklahoma City-Ada-Atoka | Nov. 331 | 374,426 | 7,069 | 381,495 | 7,321,219 | 1,044,764 | 243,932 | 109.6 | 46,976 | 36,690 | 122,180 | 104,714 |
| Pennsylvania | Nov. 132 | 1,084,405 | 3,052 | 1,087,457 | 1,044,764 | 1,497,682 | 243,932 | 98.2 | 131,387 | 438,592 | 1,013,128 | 717,011 |
| Long Island | Nov. 10,112 | 44,970,269 | 23,142,563 | 68,112,832 | 38,300 | 324,654 | 4,690 | 64.5 | 115,108 | 35,138 | 39,695 | 41,519 |
| Pennsylvania-Reading Seashore Lines | Nov. 10,112 | 568,504,149 | 235,027,930 | 803,532,079 | 435,883 | 4,113,202 | 43,001 | 61.7 | 1,566,075 | 477,261 | 571,497 | 837,726 |
| Pere Marquette | Nov. 376 | 1,029,261 | 2,160,088 | 3,189,349 | 1,289,250 | 11,514,219 | 1,439,484 | 64.7 | 4,069,683 | 2,956,405 | 1,809,148 | 2,095,788 |
| Pittsburgh & Shawmut | Nov. 392 | 394,464 | 214,162 | 608,626 | 18,237,600 | 137,682,471 | 2,101,372 | 61.8 | 51,274,062 | 37,974,336 | 21,913,148 | 23,674,928 |
| Pittsburgh & West Virginia | Nov. 1,949 | 42,273,234 | 3,158,533 | 45,431,767 | 24,102,534 | 28,343,974 | 2,101,372 | 86.4 | 77,669 | 28,006 | 22,982 | 55,601 |
| Pittsburgh & Northern | Nov. 97 | 118,371 | ..... | 118,371 | 171,694 | 62,720 | 3,092 | 81.5 | 1,341,5 | 27,365 | 75,561 | 20,316 |
| *Reading | Nov. 136 | 6,028,710 | ..... | 6,028,710 | 1,809,901 | 698,607 | 34,844 | 60.0 | 1,062,908 | 300,100 | 441,049 | 610,081 |
| Richmond, Fredericksburg & Potomac | Nov. 136 | 6,028,710 | ..... | 6,028,710 | 268,969 | 46,304 | 12,563 | 79.0 | 29,981 | Cr. 11,698 | 23,968 | 26,955 |
| Rutland | Nov. 190 | 66,055 | ..... | 66,055 | 62,720 | 62,720 | 3,092 | 74.8 | 439,050 | 123,844 | 157,149 | 324,863 |
| St. Louis-San Francisco | Nov. 1,365 | 6,829,351 | ..... | 6,829,351 | 171,694 | 62,720 | 3,092 | 80.0 | 14,795,765 | 6,724,280 | 7,280,040 | 9,147,752 |
| St. Louis, San Francisco & Texas | Nov. 1,365 | 6,829,351 | ..... | 6,829,351 | 171,694 | 62,720 | 3,092 | 80.0 | 14,795,765 | 6,724,280 | 7,280,040 | 9,147,752 |
| *Total operating revenues of the Reading for the month of October, which were given as \$6,478,198, in the | Nov. 1,366 | 6,804,201 | 10,295,903 | 101,120,566 | 15,070,463 | 22,602,902 | 954,802 | 76.6 | 33,653,635 | 11,602,777 | 12,148,766 | 13,023,889 |
| | Nov. 118 | 1,088,344 | 1,150,421 | 2,238,765 | 307,152 | 294,225 | 13,369 | 59.5 | 989,797 | 681,076 | 195,760 | 203,241 |
| | Nov. 118 | 15,054,537 | 12,763,500 | 27,818,037 | 3,888,302 | 5,694,097 | 156,232 | 65.2 | 10,560,248 | 7,184,592 | 1,965,420 | 2,948,821 |
| | Nov. 407 | 258,083 | 45,389 | 303,472 | 368,681 | 59,320 | 12,673 | 108.7 | 30,974 | 26,551 | 71,415 | 9,345 |
| | Nov. 407 | 3,213,393 | 680,182 | 4,681,190 | 752,116 | 943,917 | 138,467 | 95.6 | 203,802 | 291,678 | 134,556 | 80,384 |
| | Nov. 4,645 | 5,903,222 | 1,936,431 | 8,589,574 | 1,208,094 | 1,620,916 | 176,349 | 74.7 | 2,175,977 | 1,031,651 | 1,119,060 | 1,739,774 |
| | Nov. 4,646 | 76,184,459 | 19,602,967 | 95,787,426 | 14,349,267 | 22,565,664 | 1,878,873 | 73.9 | 27,171,510 | 13,040,012 | 14,034,978 | 15,896,582 |
| | Nov. 160 | 234,703 | 20,966 | 255,669 | 34,937 | 33,203 | 107,919 | 72.8 | 71,848 | 53,274 | 19,558 | 24,906 |
| | Nov. 160 | 2,940,747 | 408,652 | 3,472,019 | 415,519 | 366,197 | 126,103 | 64.8 | 1,220,544 | 257,184 | 314,216 | 366,830 |
| * Total operating revenues of the Reading for the month of October, which were given as \$6,478,198, in the | | | | | | | | | | | | |

(Table continued on next left-hand page)

HSGI

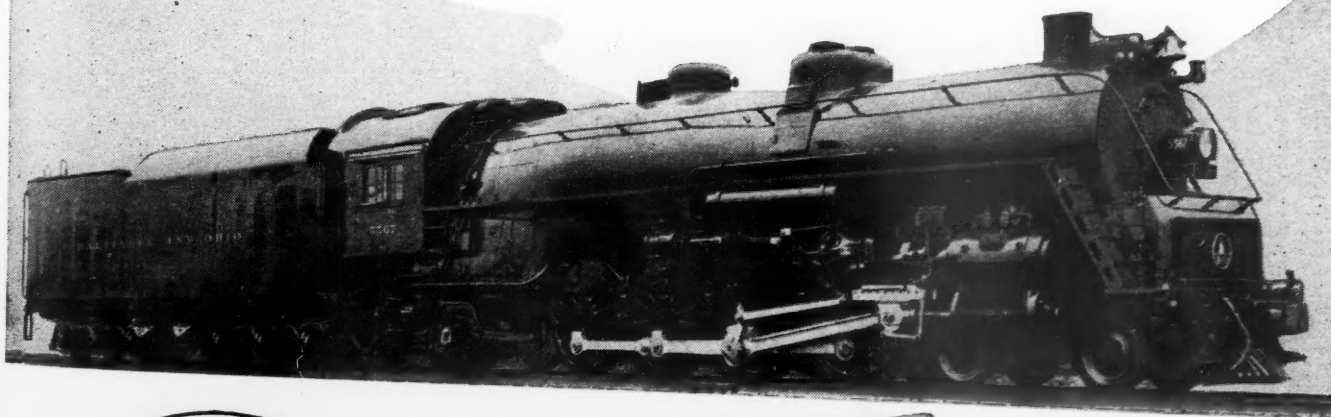
WEAR
RESISTING
PARTS



SPANNING THE YEARS ON THE B&O

MORE than a generation ago the B & O began using HUNT-SPILLER GUN IRON bushings and other vital parts. Today, despite the greatly intensified conditions under which modern power operates, HSGI components continue to fulfill the Baltimore and Ohio's exacting requirements.

Anyone looking for assurances of satisfaction must be impressed by a fact like this, especially since 75 other Class I roads have also been HSGI users since 1910 or before.



HUNT-SPILLER MFG. CORPORATION

N. C. RAYMOND, President

E. J. FULLER, Vice-Pres. & Gen. Mgr.

383 Dorchester Ave.

★ South Boston 27, Mass.

Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.

Export Agents:

International Rwy. Supply Co., 30 Church Street, New York 7, N. Y.

Cylinder Bushings
Cylinder Packing Rings
Pistons or Piston Bull Rings
Valve Bushings
Valve Packing Rings
Valve Bull Rings

Crosshead Shoes
Hub Liners
Shoes and Wedges
Floating Rod Bushings
Light Weight Valves
Cylinder Liners and Pistons
for Diesel Service

Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings, All Shapes

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF NOVEMBER AND ELEVEN MONTHS OF CALENDAR YEAR 1945—CONTINUED

| Name of road | Av. mileage operated during period | Operating revenues | | | Operating expenses | | | Operating ratio | Net from railway operation | Net railway operating income | | |
|---|------------------------------------|--------------------|------------|--------------------|-----------------------------------|-------------|-----------|-----------------|----------------------------|------------------------------|----------------------|------------|
| | | Freight | Passenger | Total (inc. misc.) | Maintenance of Way and structures | Equip-ment | Traffic | | | Trans- portation | Railway tax accruals | 1945 | 1944 |
| St. Louis Southwestern Lines | Nov. 1,607 | \$3,538,925 | \$387,698 | \$4,078,461 | \$923,333 | \$1,286,675 | \$113,162 | 88.9 | \$452,697 | \$940,403 | \$616,498 | \$991,454 |
| Seaboard Air Line | 11 mos. 1,607 | 55,979,026 | 3,289,418 | 61,100,975 | 7,992,332 | 8,998,846 | 1,186,846 | 55.7 | 27,075,668 | 16,936,967 | 7,183,623 | 9,851,511 |
| | Nov. 4,151 | 6,265,659 | 2,731,169 | 9,740,201 | 1,477,260 | 1,753,594 | 237,342 | 75.3 | 2,402,661 | 605,000 | 1,412,634 | 1,805,110 |
| | 11 mos. 4,168 | 76,346,321 | 35,123,483 | 120,101,662 | 16,772,464 | 20,764,284 | 2,684,148 | 69.2 | 36,965,168 | 15,475,000 | 17,362,385 | 20,654,113 |
| Southern Railway | Nov. 6,505 | 12,631,159 | 4,022,621 | 17,940,810 | 2,364,628 | 2,938,103 | 268,406 | 70.4 | 5,315,805 | 2,886,942 | 2,132,883 | 2,718,616 |
| Alabama Great Southern | 11 mos. 6,505 | 162,579,694 | 52,980,172 | 229,958,872 | 28,954,344 | 38,137,028 | 2,931,577 | 63.8 | 83,358,773 | 53,438,615 | 26,533,259 | 30,080,914 |
| | Nov. 315 | 876,006 | 372,181 | 1,334,249 | 143,957 | 266,885 | 23,896 | 71.0 | 386,993 | 259,807 | 105,357 | 125,712 |
| | 11 mos. 315 | 12,964,694 | 4,276,863 | 18,397,411 | 2,034,440 | 3,324,688 | 302,602 | 65.4 | 6,364,780 | 4,357,544 | 1,486,822 | 1,735,226 |
| Cincinnati, New Orleans & Texas Pacific | Nov. 337 | 1,668,726 | 474,885 | 2,273,337 | 229,757 | 482,407 | 39,260 | 68.7 | 710,604 | 341,042 | 355,899 | 375,777 |
| Georgia Southern & Florida | 11 mos. 337 | 22,877,721 | 6,404,366 | 31,007,560 | 3,398,828 | 6,969,871 | 459,057 | 66.3 | 10,456,059 | 7,178,525 | 3,959,678 | 4,511,502 |
| | Nov. 397 | 314,854 | 166,714 | 527,670 | 67,421 | 72,282 | 4,818 | 71.8 | 148,803 | 69,607 | 46,936 | 62,040 |
| | 11 mos. 397 | 3,078,163 | 2,507,214 | 6,150,893 | 780,286 | 829,989 | 33,240 | 62.3 | 2,321,195 | 1,238,664 | 707,536 | 648,281 |
| New Orleans & Northeastern | Nov. 204 | 494,910 | 192,491 | 735,388 | 114,470 | 111,400 | 12,510 | 63.1 | 271,576 | 148,285 | 54,385 | 108,570 |
| Southern Pacific | 11 mos. 204 | 8,142,962 | 2,191,529 | 10,901,202 | 1,494,312 | 1,320,794 | 154,728 | 55.7 | 4,825,985 | 2,961,065 | 1,050,825 | 1,094,545 |
| | Nov. 8,247 | 20,022,402 | 8,812,965 | 32,130,243 | 6,490,764 | 11,935,483 | 660,019 | 106.9 | 22,000,980 | 3,776,932 | 192,329 | 2,112,632 |
| | 11 mos. 8,247 | 303,432,278 | 99,369,746 | 441,667,990 | 64,147,164 | 96,433,512 | 7,326,273 | 76.3 | 104,651,060 | 56,937,318 | 30,427,641 | 36,001,661 |
| Texas & New Orleans | Nov. 4,322 | 6,026,982 | 2,038,584 | 8,768,732 | 1,656,798 | 1,721,983 | 156,500 | 76.3 | 2,081,495 | 644,500 | 966,897 | 1,251,636 |
| Spokane, Portland & Seattle | 11 mos. 4,322 | 80,844,969 | 22,699,121 | 110,689,812 | 16,091,102 | 15,966,138 | 1,745,654 | 63.2 | 40,695,885 | 21,583,084 | 13,404,747 | 15,892,072 |
| | Nov. 944 | 2,633,011 | 1,110,432 | 1,454,593 | 906,568 | 483,823 | 13,577 | 137.0 | 537,755 | 44,382 | 668,356 | 422,526 |
| | 11 mos. 944 | 20,571,636 | 1,710,234 | 23,564,041 | 7,339,661 | 3,039,129 | 156,418 | 76.8 | 5,459,326 | 1,519,095 | 2,140,379 | 3,770,775 |
| Tennessee Central | Nov. 286 | 268,567 | 20,604 | 308,228 | 75,490 | 50,967 | 7,036 | 86.2 | 42,401 | 8,655 | 16,250 | 21,004 |
| Texas & Pacific | 11 mos. 286 | 3,052,208 | 315,791 | 3,566,421 | 704,076 | 639,313 | 74,993 | 80.8 | 685,151 | 238,881 | 271,656 | 391,431 |
| | Nov. 1,874 | 3,271,212 | 1,383,851 | 5,163,390 | 777,453 | 627,892 | 115,335 | 63.4 | 1,890,661 | 807,249 | 918,292 | 562,191 |
| | 11 mos. 1,878 | 47,939,708 | 16,398,896 | 70,233,849 | 9,522,448 | 8,994,929 | 1,263,246 | 58.0 | 29,518,078 | 17,529,906 | 9,584,728 | 6,162,149 |
| Texas Mexican | Nov. 162 | 146,441 | 478 | 165,393 | 30,492 | 22,663 | 4,549 | 67.8 | 53,336 | 20,157 | 19,884 | 51,700 |
| Toledo, Peoria & Western | 11 mos. 162 | 1,803,445 | 6,912 | 2,026,763 | 451,722 | 205,177 | 46,173 | 66.3 | 683,266 | 221,910 | 345,000 | 377,112 |
| | Nov. .... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| | 11 mos. .... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Union Pacific System | Nov. 9,777 | 22,843,228 | 8,800,409 | 34,639,171 | 6,298,879 | 13,374,086 | 636,275 | 98.0 | 698,566 | Cr. 807,447 | 335,045 | 3,092,631 |
| Utah | 11 mos. 9,780 | 339,741,226 | 87,808,671 | 464,188,538 | 63,145,139 | 104,269,244 | 6,706,902 | 70.3 | 137,998,013 | 93,417,114 | 31,539,744 | 34,205,032 |
| | Nov. 111 | 161,631 | ..... | 161,631 | 11,132 | 44,108 | 547 | 69.3 | 49,605 | 26,096 | 25,706 | 11,226 |
| | 11 mos. 111 | 1,344,856 | ..... | 1,345,239 | 156,181 | 439,945 | 6,017 | 78.2 | 285,761 | 178,489 | 177,169 | 124,734 |
| Virginian | Nov. 656 | 2,176,483 | 7,025 | 2,288,423 | 371,203 | 1,558,990 | 27,717 | 113.3 | 206,649 | Cr. 302,300 | 109,959 | 593,326 |
| Wabash | 11 mos. 657 | 25,243,449 | 102,438 | 26,296,587 | 3,148,476 | 8,326,117 | 296,682 | 69.2 | 8,091,548 | 2,887,000 | 6,554,688 | 6,571,110 |
| | Nov. 2,393 | 5,446,283 | 923,205 | 6,847,253 | 1,042,919 | 907,482 | 179,138 | 70.0 | 2,401,798 | 1,890,837 | 695,229 | 734,301 |
| | 11 mos. 2,393 | 70,215,394 | 9,293,458 | 84,609,282 | 11,732,157 | 11,341,846 | 1,964,751 | 65.5 | 29,177,089 | 16,652,261 | 8,221,818 | 8,267,600 |
| Ann Arbor | Nov. 294 | 513,554 | 15,622 | 545,509 | 67,404 | 90,804 | 16,481 | 72.2 | 151,500 | 94,760 | 58,239 | 52,388 |
| Western Maryland | 11 mos. 294 | 5,300,816 | 120,305 | 5,616,967 | 728,741 | 1,011,630 | 183,771 | 77.2 | 1,281,489 | 629,749 | 626,100 | 626,413 |
| | Nov. 840 | 2,435,840 | 48,318 | 2,575,828 | 332,036 | 562,669 | 52,739 | 70.5 | 759,306 | 227,000 | 634,157 | 602,252 |
| | 11 mos. 840 | 30,296,983 | 442,582 | 31,662,568 | 4,821,005 | 6,694,013 | 521,859 | 68.5 | 9,961,873 | 4,726,000 | 5,949,885 | 6,309,745 |
| Western Pacific | Nov. 1,195 | 3,347,488 | 994,015 | 4,488,768 | 660,787 | 836,690 | 94,633 | 68.7 | 1,406,624 | 306,220 | 902,169 | 1,769,396 |
| Wheeling & Lake Erie | 11 mos. 1,195 | 44,817,912 | 8,543,242 | 55,228,087 | 7,489,911 | 7,641,671 | 1,025,292 | 61.3 | 21,399,967 | 12,670,526 | 6,504,995 | 7,735,742 |
| | Nov. 505 | 1,630,478 | 3 | 1,695,736 | 296,430 | 361,790 | 608,133 | 80.9 | 324,104 | 259,894 | 263,382 | 227,288 |
| | 11 mos. 507 | 22,239,011 | 28 | 23,091,768 | 2,837,550 | 7,297,010 | 476,674 | 78.7 | 4,910,279 | 4,264,406 | 2,664,251 | 2,991,489 |
| Wisconsin Central | Nov. 1,051 | 1,494,831 | 87,083 | 1,735,565 | 862,609 | 202,216 | 40,882 | 108.7 | 151,707 | 106,465 | 407,561 | 181,984 |
| | 11 mos. 1,122 | 16,918,604 | 1,026,386 | 19,634,962 | 3,182,533 | 3,359,591 | 462,377 | 78.5 | 4,223,956 | 2,163,603 | 1,539,381 | 2,829,039 |